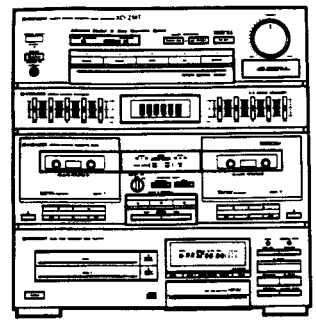
PIONEER
The Art of Entertainment

Service Manual



ORDER NO.
ARP2136

STEREO TWIN CD CASSETTE DECK AMPLIFIER

XD-Z54T

MODEL XD−Z54T HAS FOLLOWING VERSIONS :

Type	Power requirement	Export destination
HE	AC220V, 240V (Switchable) *	European continent
HB	AC220V, 240V (Switchable) *	United Kingdom
HEWZIW	AC220V, 240V (Switchable) *	Germany and Italy

* Change the jumper wires of assembly board.

- **This manual is applicable to the XD−Z54T/HE and HB types.**
- **As to the HB type, refer to page 77.**
- **As to the other type, refer to applicable service manual.**
- **This product is a component of a system. As to the system composition, refer to the system manual.**
- **As to the MECHANISM DESCRIPTION, refer to the PD−Z74T service guide (ARP2144).**
- **For adjustment refer to ADJUSTMENTS FOR XD−Z54T, XD−Z84T, DC−Z94, DC−Z84 and DC−Z74 (ARP2140).**

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1. SAFETY INFORMATION

(FOR EUROPEAN MODEL ONLY)

VARO!
AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

ADVERSEL:
USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSAETTELSE FOR STRÅLING.

VARNING!
OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.

LASER
Kuva 1
Lasersateilyn
varoitusmerkki

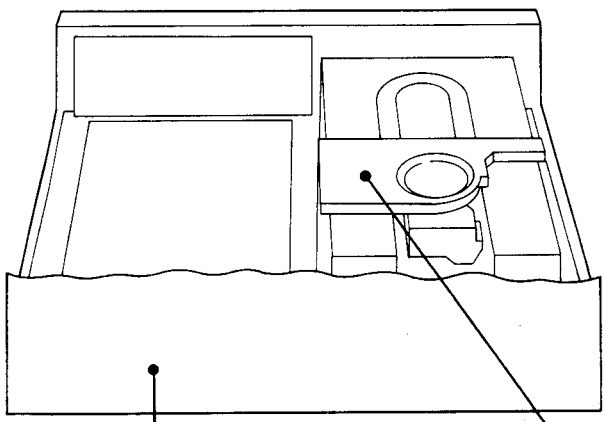
WARNING!
DEVICE INCLUDES LASER DIODE WHICH EMITS INVISIBLE INFRARED RADIATION WHICH IS DANGEROUS TO EYES. THERE IS A WARNING SIGN ACCORDING TO PICTURE 1 INSIDE THE DEVICE CLOSE TO THE LASER DIODE.

IMPORTANT
THIS PIONEER APPARATUS CONTAINS LASER OF HIGHER CLASS THAN 1. SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS
MAXIMUM OUTPUT POWER: 5 mw
WAVELENGTH: 780-785 nm

LASER
Picture 1
Warning sign for
laser radiation

LABEL CHECK (TWIN type)

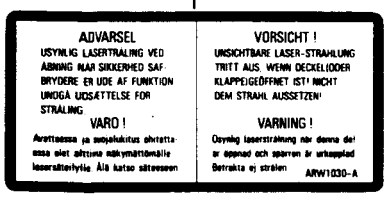


HE, HEWZIW and HB types

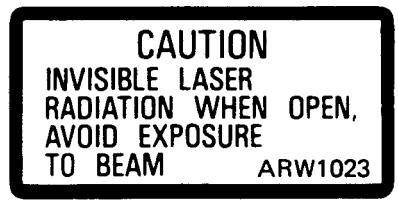
Additional Laser Caution

1. Laser Interlock Mechanism
   The ON/OFF (ON : low level/OFF : high level) status of the U (S601) and L (S603) switches for detecting the disc clamp state is detected by the system microprocessor, and the design prevents laser diode oscillation when both switches U and L are OFF (high level).
   Thus, the interlock will no longer function if switches U (S601) and L (S603) are deliberately shorted.
   Laser diode oscillation will continue if pins 2 and 3 of CXA1471S (IC101) are connected to ground or pin 20 is connected to high level (ON) or the terminals of Q101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 or higher laser beam.


ADVARSEL
USYNLIG LASERTRALING VED ÅBNING NAR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING
VARO!
VORSICHT!
UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKEL(ODER KLAPPE)GÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
VARNING!
ARW1030-A

HE and HEWZIW types



HB type

HE, HB and HEWZIW types

2. EXPLODED VIEWS, PACKING AND PARTS LIST

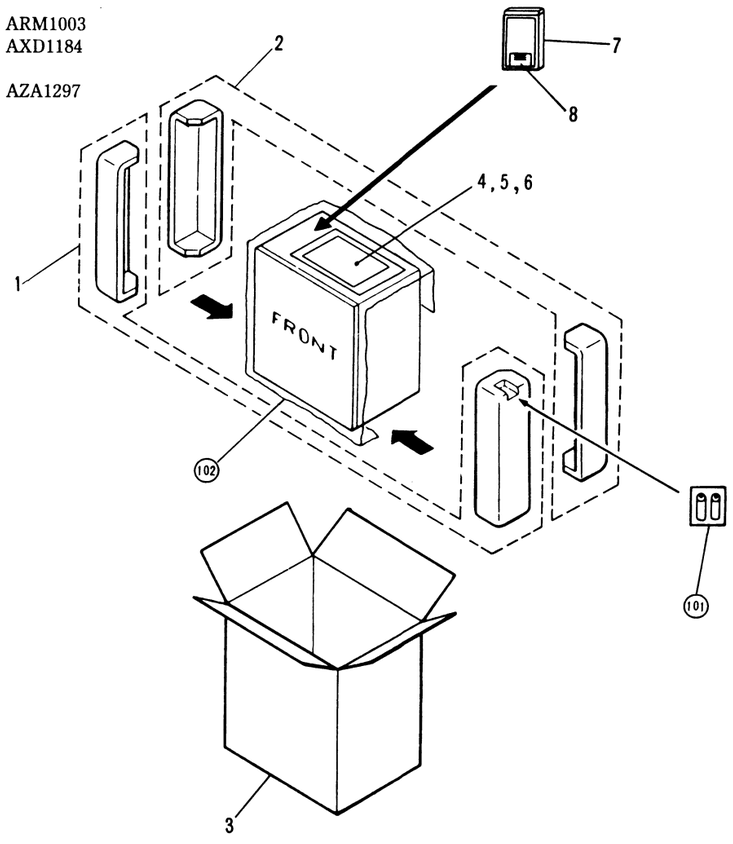
2.1 PACKING

NOTES:

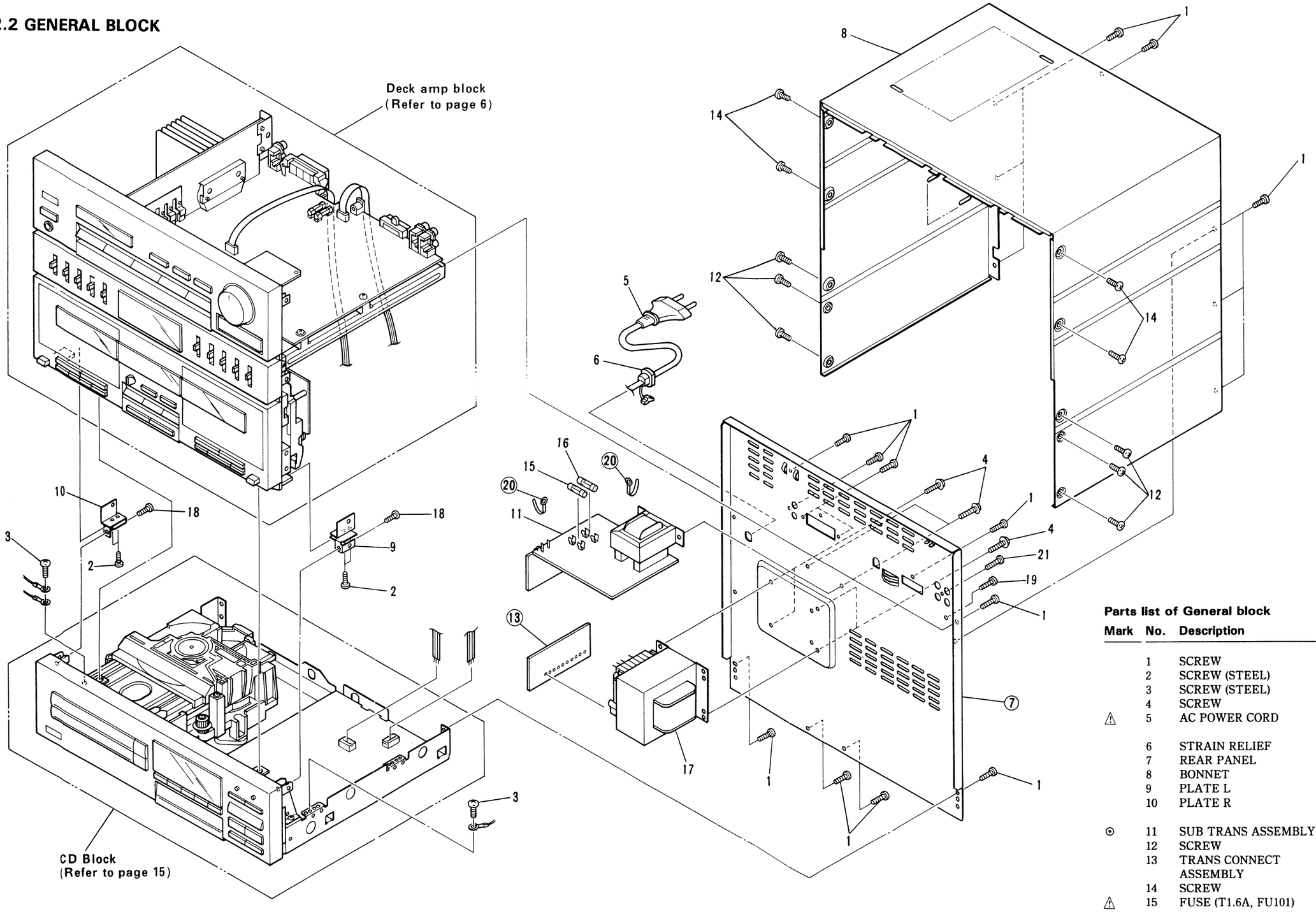
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Packing

Mark	No.	Description	Parts No.
	1	FRONT PAD L, R	AHA1406
	2	REAR PAD L, R	AHA1407
	3	PACKING CASE	AHD1967
	4	OPERATIONG INSTRUCTIONS (Nederlands, Svenska,Español, Português)	ARC1241
	5	OPERATIONG INSTRUCTIONS (English, Deutsch, Français, Italiano)	ARE1171
	6	CAUTION CARD	ARM1003
	7	REMOTE CONTROL UNIT (CU-DC021)	AXD1184
	8	BATTERY COVER	AZA1297
	101	DRY CELL BATTERY (R03, AAA)	
	102	SHEET	



2.2 GENERAL BLOCK



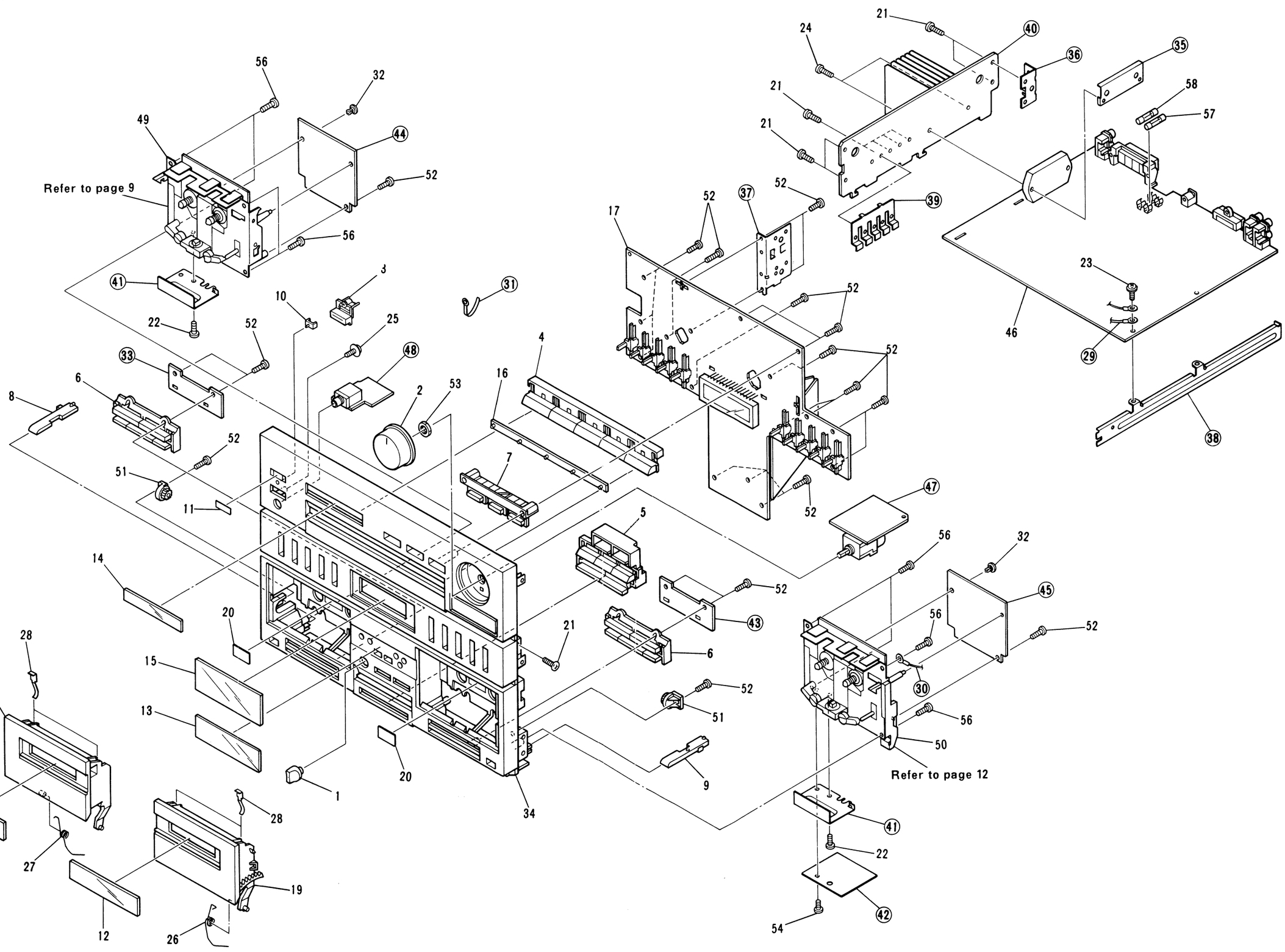
Parts list of General block

Mark	No.	Description	Parts No.
	1	SCREW	ABA–298
	2	SCREW (STEEL)	ABA1007
	3	SCREW (STEEL)	ABA1009
	4	SCREW	ABA1082
⚠	5	AC POWER CORD	ADG1049
	6	STRAIN RELIEF	AEC–882
	7	REAR PANEL	
	8	BONNET	ANE1275
	9	PLATE L	ANG1536
	10	PLATE R	ANG1537
⊙	11	SUB TRANS ASSEMBLY	AWR1056
	12	SCREW	BBZ30P080FZK
	13	TRANS CONNECT ASSEMBLY	
	14	SCREW	VPZ30P080FZK
⚠	15	FUSE (T1.6A, FU101)	AEK–405
⚠	16	FUSE (T1.25A, FU102)	AEK–018
⚠	17	POWER TRANSFORMER (T102)	ATS1317
	18	SCREW	VPZ30P080FMC
	19	SCREW	VBZ35P080FZK
	20	NYLON BINDER	

2.3 DECK AMP BLOCK

Parts list of Deck amp block

Mark	No.	Description	Parts No.
	1	ROTARY KNOB (DOLBY NR)	AAB1136
	2	VOL KNOB (VOLUME)	AAB1200
	3	POWER BUTTON	AAD1674
	4	FUNCTION BUTTON (PLS)	AAD1894
	5	REC. COPY BUTTON (PLS)	AAD1895
	6	DECK PLAY BUTTON (PLS)	AAD1896
	7	AI BUTTON (PLS)	AAD1897
	8	EJECT BUTTON L (PLS)	AAD1898
	9	EJECT BUTTON R (PLS)	AAD1922
	10	LENS (POWER IND)	AAK1800
	11	FILTER (REMOTE SENSOR)	AAK1812
	12	DECORATIVE PLATE (DOOR)	AAK2065
	13	DECORATIVE PLATE A (DECK)	AAK2067
	14	AI DECORATIVE PLATE	AAK2068
	15	DECORATIVE PLATE (GEQ)	AAK2069
	16	INDICATOR LENS	AAK2075
⊙	17	DISPLAY ASSEMBLY	AWZ3350
	18	CASSETTE DOOR (R)	AAN1250
	19	CASSETTE DOOR (L)	AAN1251
	20	FABEL (PAPER)	AAX1301
	21	SCREW	ABA－298
	22	SCREW (STEEL)	ABA1009
	23	SCREW (STEEL)	ABA1011
	24	SCREW	ABA1018
	25	SCREW (STEEL)	ABA1095
	26	DOOR SPRING L	ABH1068
	27	DOOR SPRING R	ABH1069
	28	KEEP PLATE	ABK1016
	29	GROUND LEAD	
	30	GROUND LEAD	
	31	NYLON BINDER	
	32	NYLON RIVET	AEC1160
	33	1 MECHA SW ASSEMBLY	
	34	FRONT PANEL	AMB1744
	35	PACK HOLDER	
	36	HEAT SINK HOLDER B	
	37	HEAT SINK HOLDER A	
	38	PLATE	
	39	PLATE	
	40	HEAT SINK	
	41	SHIELD PLATE (MECHA)	
	42	SHIELD PLATE	
	43	2 MECHA SW ASSEMBLY	
	44	1 MECHA ASSEMBLY	
	45	2 MECHA ASSEMBLY	
⊙	46	AF ASSEMBLY	AWZ3333
	47	VR ASSEMBLY	
	48	HEAD PHONE ASSEMBLY	
	49	1 MECHA UNIT	EXK2020
	50	2 MECHA UNIT	EXK2010
	51	DAMPER ASSEMBLY	AXA1008
	52	SCREW	BPZ26P080FMC
	53	NUT	NK90FUC
	54	SCREW	PCZ30P040FMC
	55	SCREW	VBZ35P080FZK
	56	SCREW	VPZ30P080FMC
⚠	57	FUSE (T1.6A, FU151)	AEK－405
⚠	58	FUSE (T1.6A, FU152)	AEK－405

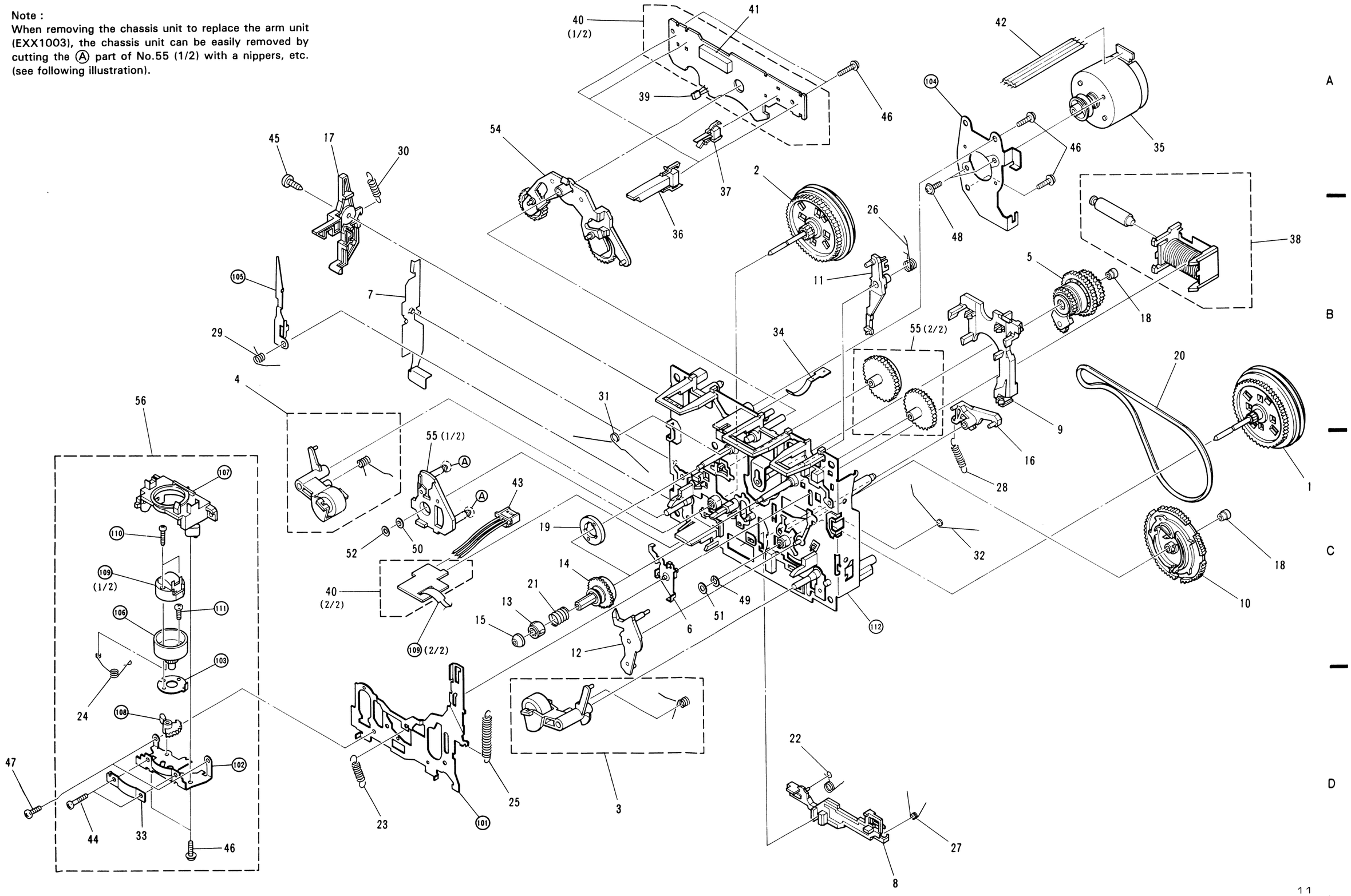

Refer to page 9
Refer to page 12

2.4 1 MECHA UNIT (EXK2020)

Parts list of 1 Mecha unit

Mark	No.	Description	Parts No.
	1	FLYWHEEL UNIT (FWD)	EXA1102
	2	FLYWHEEL UNIT (RVS)	EXA1103
	3	ROLLER UNIT (FWD)	EXA1104
	4	ROLLER UNIT (RVS)	EXA1105
	5	LIMITER UNIT	EXA1106
	6	LEVER UNIT	EXA1107
	7	ARM	AZN2063
	8	NR LEVER	ENV1155
	9	BRAKE	ENV1157
	10	CAM GEAR	ENV1158
	11	LOCK ARM	ENV1159
	12	NR ARM	ENV1163
	13	REEL COLLAR	ENV1164
	14	REEL	ENV1170
	15	REEL BUSH	ENV1178
	16	ARM	ENV1181
	17	ARM	AZN2069
	18	BUSH	ENV1184
	19	MAGNET	ENV1185
	20	BELT	ENT1015
	21	SPRING	EBH1201
	22	SPRING	EBH1202
	23	SPRING	EBH1203
	24	SPRING	EBH1204
	25	SPRING	EBH1208
	26	SPRING	EBH1209
	27	SPRING	EBH1210
	28	SPRING	EBH1211
	29	SPRING	EBH1255
	30	SPRING	EBH1213
	31	SPRING	EBH1220
	32	SPRING	EBH1256
	33	SPRING	EBL1013
	34	SPRING	EBL1014
	35	MOTOR UNIT	EXA1108
	36	SWITCH (Detect)	ESN1003
	37	SWITCH (Mode)	ESN1004
	38	SOLENOID	EXP1005
	39	HALL IC	DN6847SE
	40	P.C.BOARD	ENX1002
	41	CONNECTOR	EKS1013
	42	LEAD WIRE	EDD1003
	43	CONNECTOR	EDE1009
	44	SCREW	EBA1020
	45	SCREW	EBA1021
	46	SCREW (M2 × 8)	ATZ20P080FMC
	47	SCREW	BSZ20P050FMC
	48	SCREW	PMS26P025FCU
	49	WASHER	EBF1008
	50	WASHER	EBF1009
	51	WASHER	EBF1010
	52	WASHER	EBF1011
	53	.....	
	54	ARM UNIT	EXX1002
	55	ARM UNIT	EXX1003
	56	P HEAD ASSEMBLY	EXX1005
	101	HEAD BASE	
	102	BRACKET	
	103	PLATE	
	104	BRACKET	
	105	ARM	
	106	HOLDER	
	107	HOLDER	
	108	GEAR	
	109	P HEAD UNIT	
	110	SCREW	
	111	SCREW	
	112	CHASSIS UNIT	

Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).

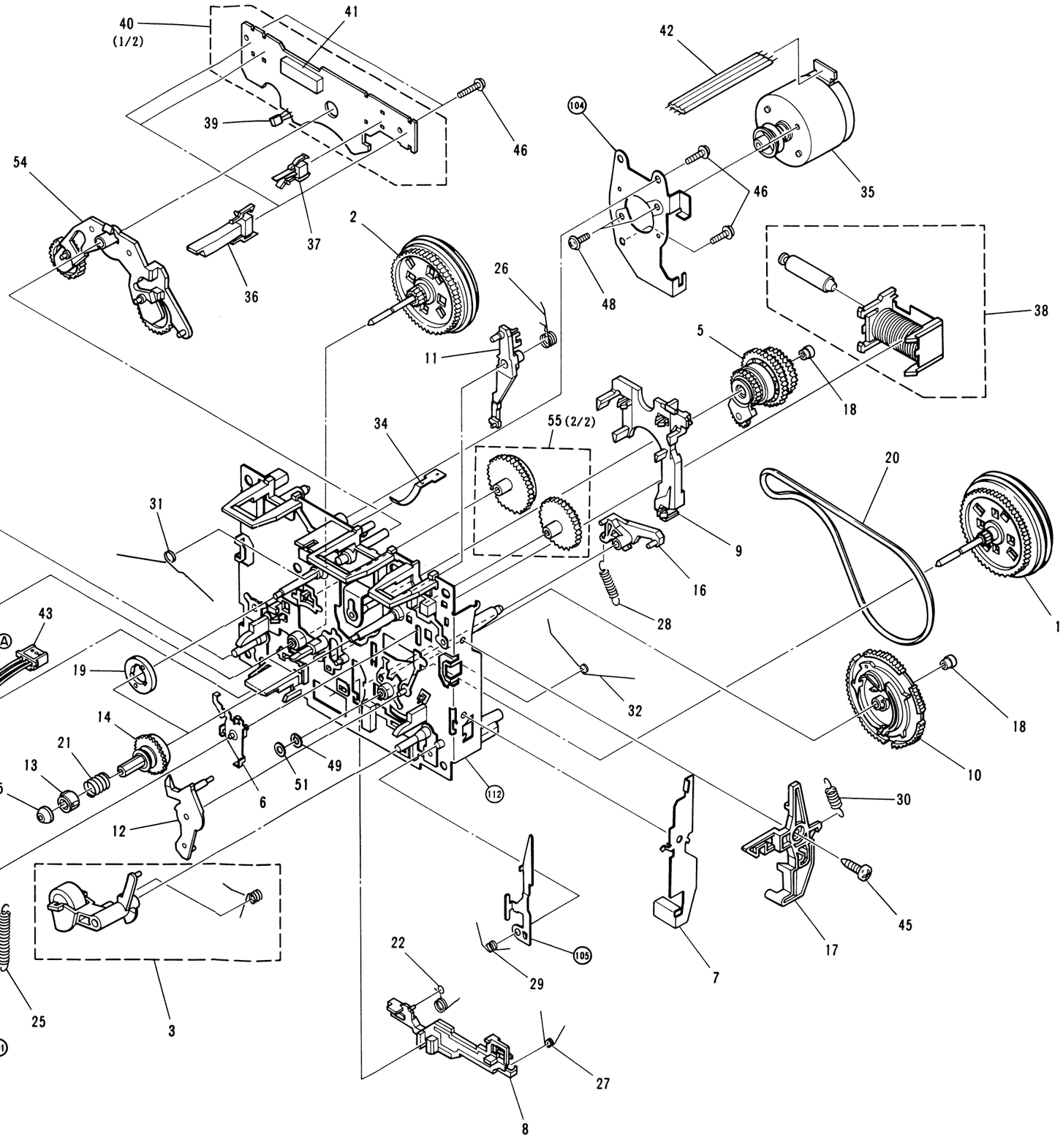


2.5 2 MECHA UNIT (EXK2010)

Parts list of 2 Mecha unit

Mark	No.	Description	Parts No.
	1	FLYWHEEL UNIT (FWD)	EXA1102
	2	FLYWHEEL UNIT (RVS)	EXA1103
	3	ROLLER UNIT (FWD)	EXA1104
	4	ROLLER UNIT (RVS)	EXA1105
	5	LIMITER UNIT	EXA1106
	6	LEVER UNIT	EXA1107
	7	ARM	AZN2064
	8	NR LEVER	ENV1155
	9	BRAKE	ENV1157
	10	CAM GEAR	ENV1158
	11	LOCK ARM	ENV1159
	12	NR ARM	ENV1163
	13	REEL COLLAR	ENV1164
	14	REEL	ENV1170
	15	REEL BUSH	ENV1178
	16	ARM	ENV1181
	17	ARM	AZN2070
	18	BUSH	ENV1184
	19	MAGNET	ENV1185
	20	BELT	ENT1015
	21	SPRING	EBH1201
	22	SPRING	EBH1202
	23	SPRING	EBH1203
	24	SPRING	EBH1204
	25	SPRING	EBH1208
	26	SPRING	EBH1209
	27	SPRING	EBH1210
	28	SPRING	EBH1211
	29	SPRING	EBH1254
	30	SPRING	EBH1213
	31	SPRING	EBH1220
	32	SPRING	EBH1256
	33	SPRING	EBL1013
	34	SPRING	EBL1014
	35	MOTOR UNIT	EXA1108
	36	SWITCH (Detect)	ESN1003
	37	SWITCH (Mode)	ESN1004
	38	SOLENOID	EXP1005
	39	HALL IC	DN6847SE
	40	P.C.BOARD	ENX1002
	41	CONNECTOR	EKS1012
	42	LEAD WIRE	EDD1003
	43	CONNECTOR	EDE1008
	44	SCREW	EBA1020
	45	SCREW	EBA1021
	46	SCREW (M2 × 8)	ATZ20P080FMC
	47	SCREW	BSZ20P050FMC
	48	SCREW	PMS26P025FCU
	49	WASHER	EBF1008
	50	WASHER	EBF1009
	51	WASHER	EBF1010
	52	WASHER	EBF1011
	53	.....	
	54	ARM UNIT	EXX1002
	55	ARM UNIT	EXX1003
	56	R/P HEAD ASSEMBLY	EXX1004
	101	HEAD BASE	
	102	BRACKET	
	103	PLATE	
	104	BRACKET	
	105	ARM	
	106	HOLDER	
	107	HOLDER	
	108	GEAR	
	109	R/P HEAD UNIT	
	110	SCREW	
	111	SCREW	
	112	CHASSIS UNIT	

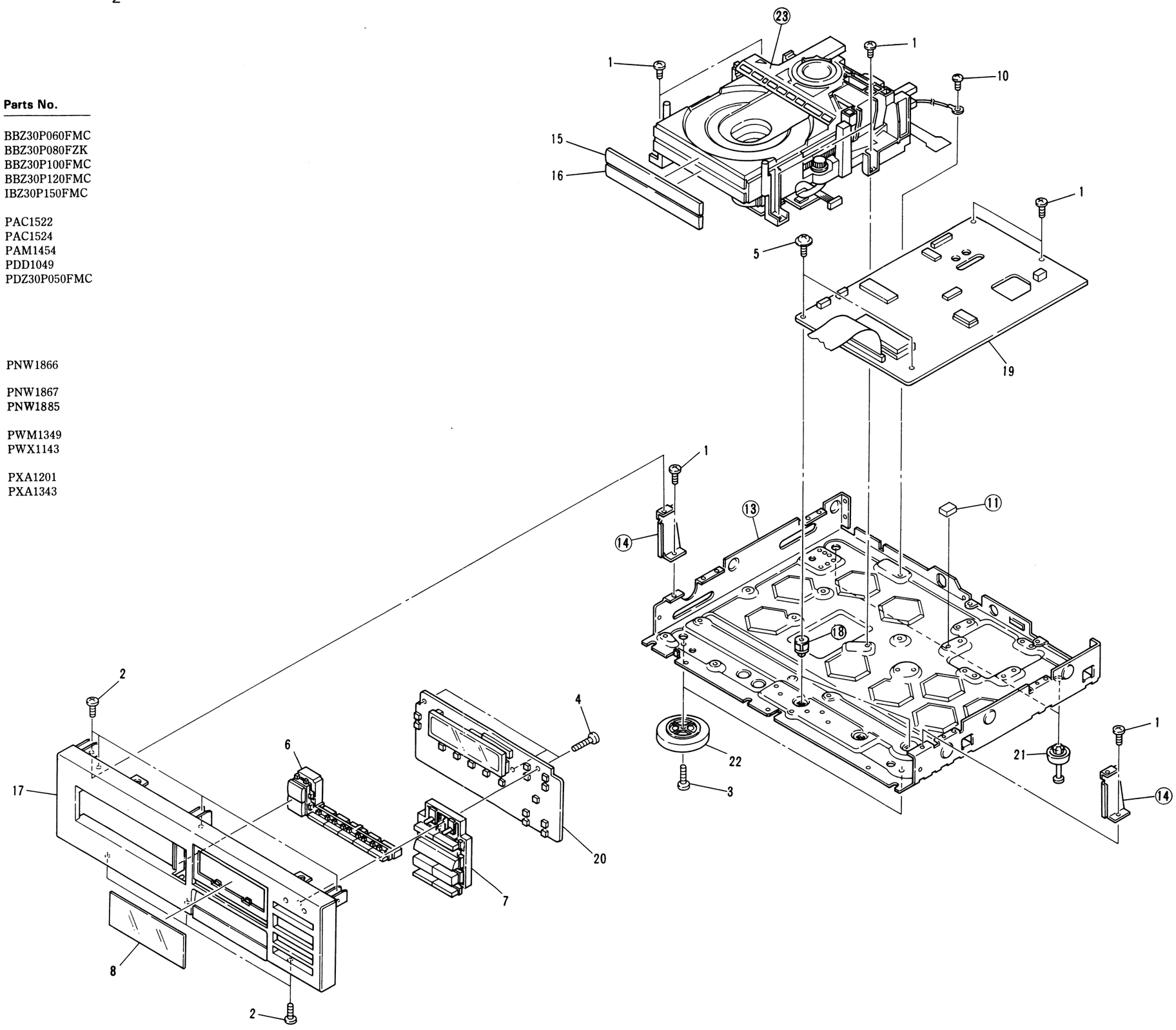
Note :
When removing the chassis unit to replace the arm unit (EXX1003), the chassis unit can be easily removed by cutting the Ⓐ part of No.55 (1/2) with a nippers, etc. (see following illustration).



2.6 CD BLOCK

Parts list of CD block

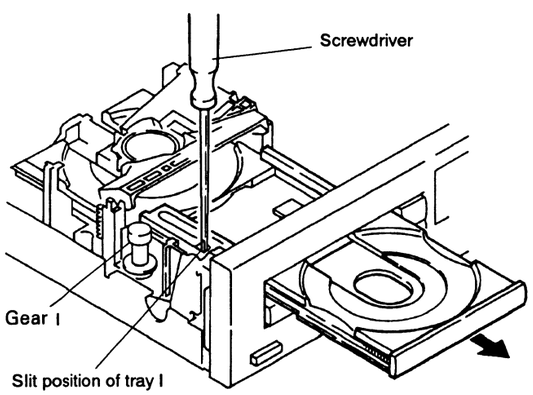
Mark	No.	Description	Parts No.
	1	SCREW	BBZ30P060FMC
	2	SCREW	BBZ30P080FZK
	3	SCREW	BBZ30P100FMC
	4	SCREW	BBZ30P120FMC
	5	SCREW	IBZ30P150FMC
	6	DISC BUTTON	PAC1522
	7	PLAY BUTTON	PAC1524
	8	WINDOW	PAM1454
	9	30P F•F•C/30V	PDD1049
	10	SCREW	PDZ30P050FMC
	11	SPACER	
	12	.....	
	13	UNDER BASE	
	14	ANGLE	
	15	NAME PLATE 1	PNW1866
	16	NAME PLATE 2	PNW1867
	17	FUNCTION PANEL	PNW1885
	18	PCB SPACER	
⚠ ⊙	19	MOTHER P.C.B ASSEMBLY	PWM1349
⚠ ⊙	20	SUB P.C.B ASSEMBLY	PWX1143
	21	FOOT ASSEMBLY	PXA1201
	22	INSULATOR ASSEMBLY	PXA1343
	23	TWIN TORAY MECHA ASSEMBLY	



2.7 REMOVING AND MOUNTING EACH BLOCK

● REMOVAL OF TRAY I AND TRAY II

1. Open the tray I.
2. Insert the flat blade screwdriver into the slit in the left of tray I. Pull out the tray I by pushing the screwdriver.



* When remove the tray II, open it first, insert the flat blade screwdriver into the slit in the right of tray II, and pull out the tray by pushing the screwdriver.

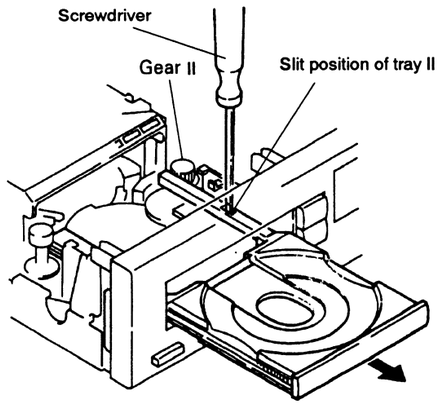


Fig. 1

● MOUNTING OF TRAY I

1. Set the disc II to the clamp position and open the tray I.
2. Align the 1st tooth of tray I to ungrooved portion of gear I, and insert the tray I.

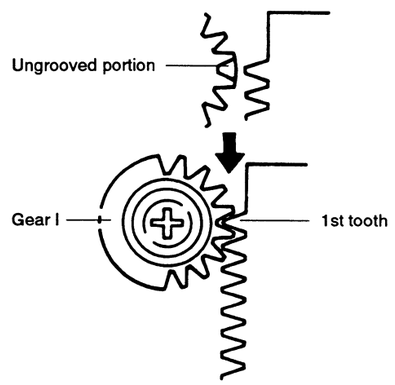


Fig. 2

● MOUNTING OF TRAY II

1. Set the disc I to the clamp position and open the tray II.
2. Align the 1st tooth of tray II to □ marked position of gear II, and insert the tray II.

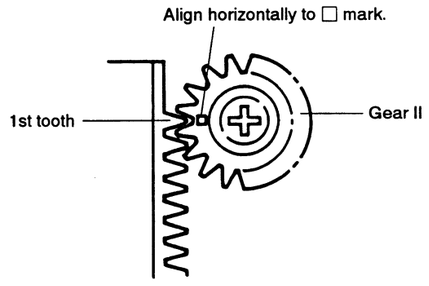


Fig. 3

● MOUNTING AND POSITIONING OF MAIN CAM, FOLLOW GEAR, GEAR I AND GEAR II

Set the following gears to the position as shown by arrows.

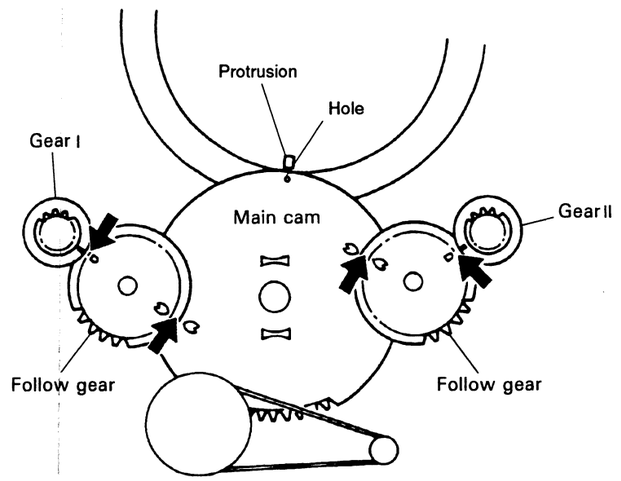


Fig. 4

● MOUNTING OF CLAMPER ASSEMBLY

Mount the clamper assembly by aligning the protrusion portion as shown in the figure.

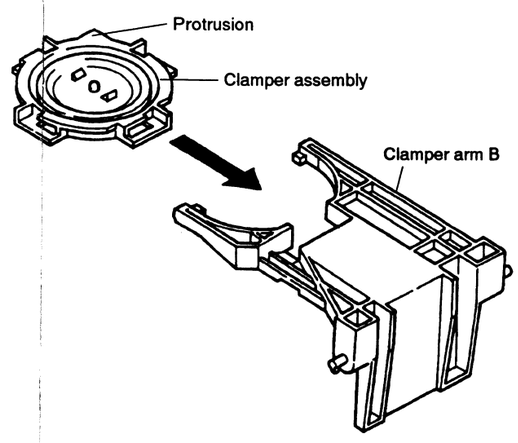


Fig. 5

2.8 CD MECHA UNIT

Parts List of Mechanism Section

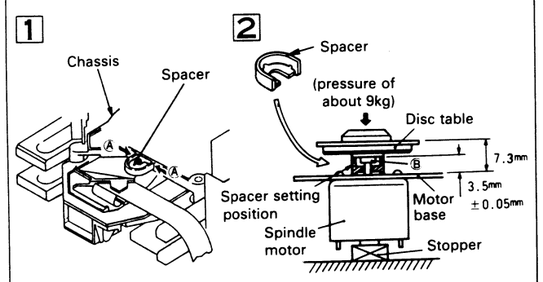
Mark	No.	Symbol & Description	Part No.
	1	Clamp spring	PBH1103
	2	Lever spring	PBH1104
	3	Belt	PEB1106
	4	Motor pulley	PNW1634
	5	Tray 1	PNW1839
	6	Tray 2	PNW1840
	7	Sub tray	PNW1841
	8	Loading base	PNW1842
	9	Main cam	PNW1843
	10	Follow gear	PNW1844
	11	Gear 1	PNW1845
	12	Gear 2	PNW1846
	13	Idler gear	PNW1847
	14	Clamper arm U	PNW1850
	15	Clamper arm B	PNW1851
	16	Clamp cam	PNW1852
	17	Float base	PNW1853
	18	Lock lever	PNW1854
	19	Motor	PXM1010
	20	Floating rubber	PEB1014
	21	Floating rubber	PEB1132
	22	Screw	PBA1048
	23	Screw	IPZ30P080FMC
	24	Screw	IPZ20P080FMC
	25	Chip capacitor	CKSYF105Z16
	26	Screw	JFZ20P025FMC
	27	Drive spring	PBH1084
	28	Plate spring	PBK1057
	29	Belt	PEB1072
	30	Drive screw	PLA1003
	31	Guide bar	PLA1071
	32	Half nut	PNW1605
	33	Disc table	PNW1608
	34	Pulley	PNW1634
	35	Earth spring	PBH1009
	36	Push switch	DSG1014
	37	Spindle motor assembly (with oil)	PEA1028
	38	Pick – up assembly	PEA1030
	39	Screw	BPZ20P080FZK
	40	Screw	PMZ20P030FMC
	41	Motor (CARRIAGE)	PXM1013
	42	Screw	PBZ30P080FMC
	43	Semi – fixed resistor	PCP1008
	44	Screw	PMZ26P040FMC
	45	Gear pulley	PNW1848
	46	Push spring	PBH1105
	47	Screw	IBZ30P200FMC
	48	Pulley	PNW1066
	49	Screw	IPZ30P120FMC

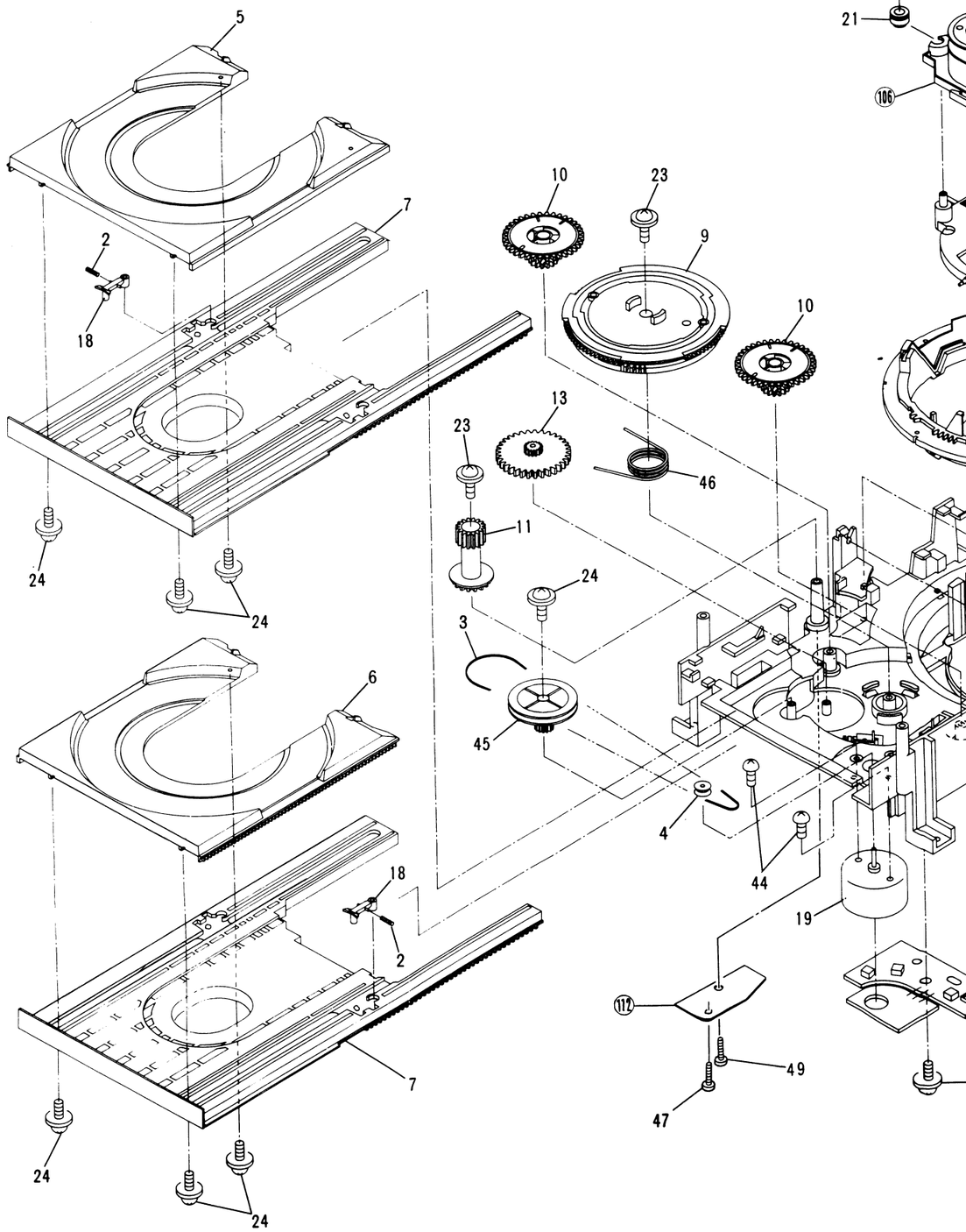
Mark	No.	Symbol & Description	Part No.
	101	Yoke	
	102	Magnet	
	103	Clamper holder	
	104	Clamper S	
	105	Mechanism P.C.B assembly	
	106	Servo mechanism assembly	
	107	Connector assembly (6P)	
	108	Mechanism chassis	
	109	Motor base	
	110	Mechanism base	
	111	Actuater cover	
	112	Sub panel plate	

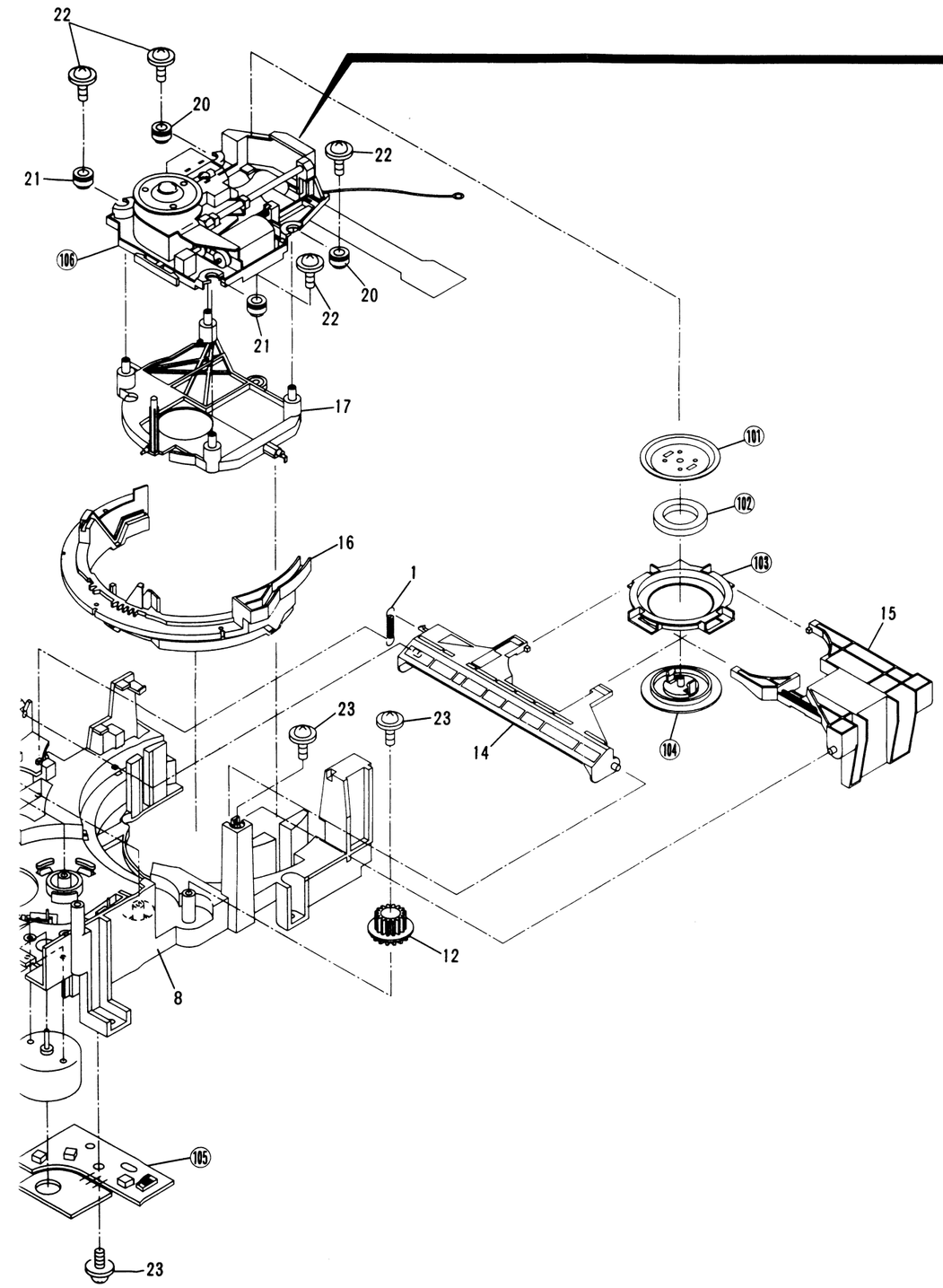
• How to install the disc table

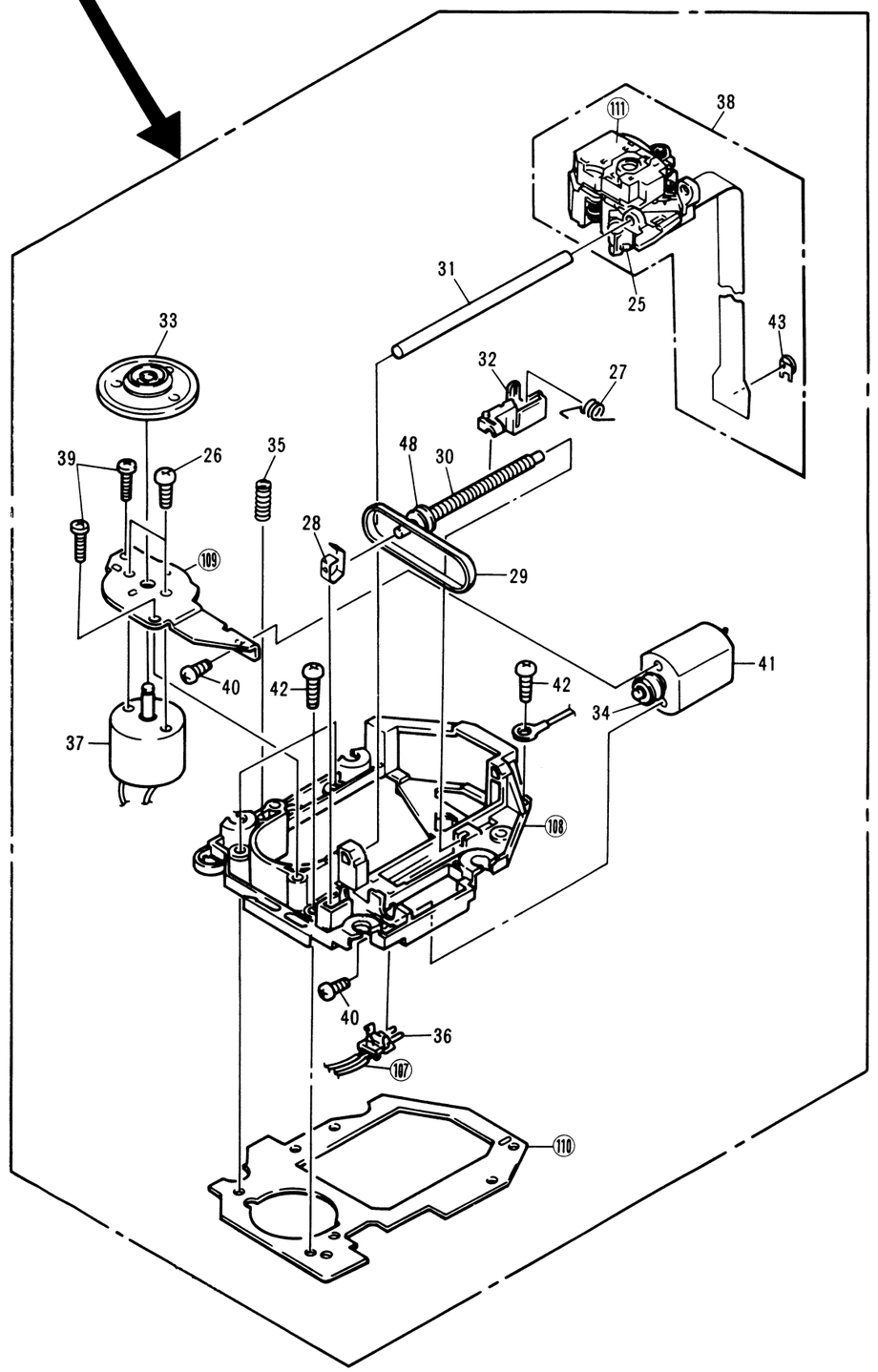
1 Use nippers or other tool to cut the two sections marked Ⓐ in figure 1. Then remove the spacer.

2 While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section Ⓑ), and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



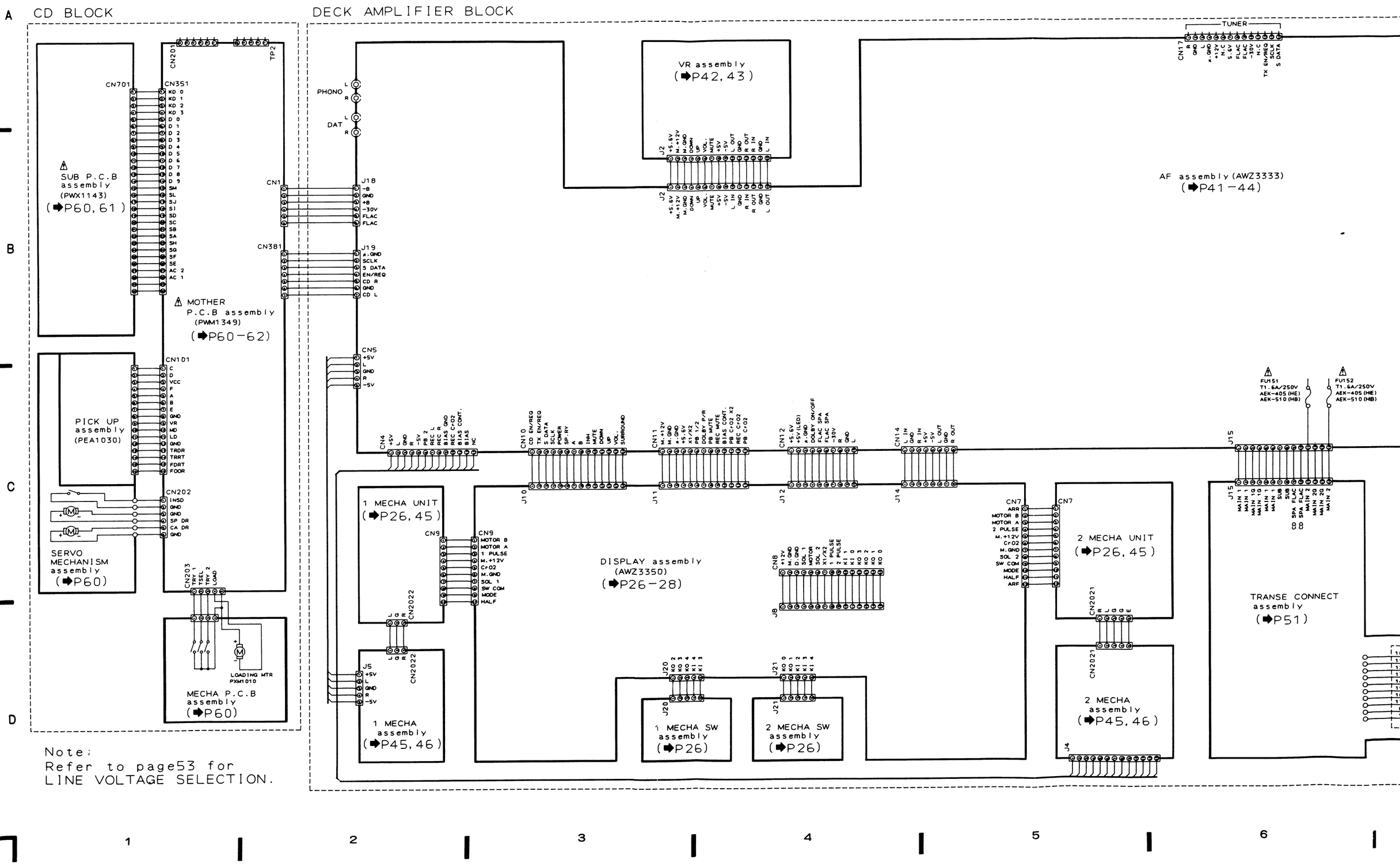



22
20
21
106
22
20
22
21
17
101
102
16
103
1
15
23
23
14
104
12
8
105
23


111
38
31
25
43
33
32
27
39
26
35
48
30
28
109
29
40
42
42
41
34
37
108
40
36
107
110

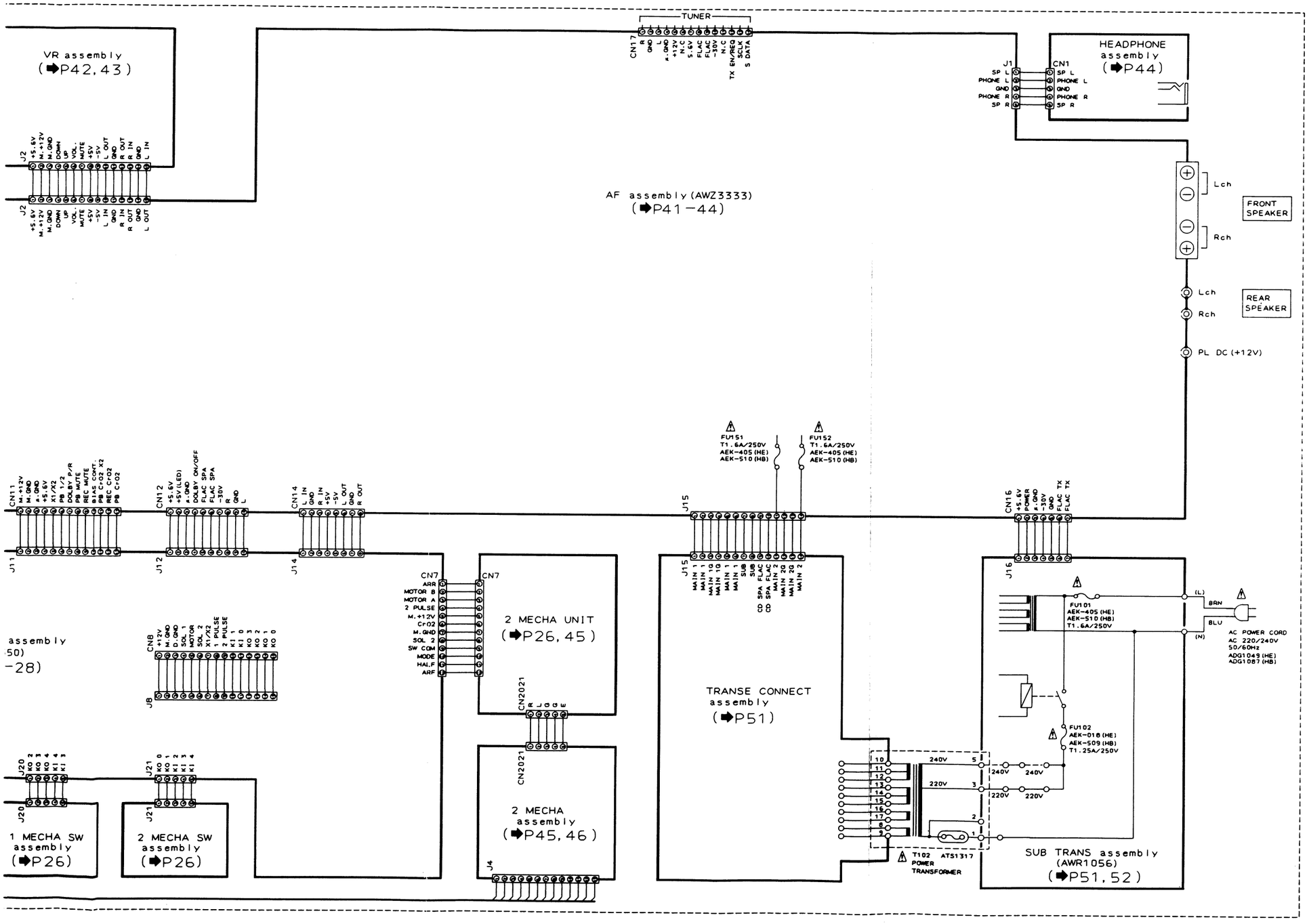
3. SCHEMATIC DIAGRAM AND P.C.BOARDS CONNECTION DIAGRAM

3.1 OVER ALL SCHEMATIC DIAGRAM


CD BLOCK
DECK AMPLIFIER BLOCK
SUB P.C.B assembly (PWX1143) (➡P60, 61)
MOTHER P.C.B assembly (PWM1349) (➡P60-62)
PICK UP assembly (PEA1030)
SERVO MECHANISM assembly (➡P60)
MECHA P.C.B assembly (➡P60)
LOADING MTR PXM1010
PHONO
DAT
VR assembly (➡P42, 43)
TUNER
AF assembly (AWZ3333) (➡P41-44)
1 MECHA UNIT (➡P26, 45)
DISPLAY assembly (AWZ3350) (➡P26-28)
1 MECHA assembly (➡P45, 46)
1 MECHA SW assembly (➡P26)
2 MECHA SW assembly (➡P26)
2 MECHA UNIT (➡P26, 45)
2 MECHA assembly (➡P45, 46)
TRANSE CONNECT assembly (➡P51)
FU151 T1.6A/250V AEK-405 (HE) AEK-510 (HB)
FU152 T1.6A/250V AEK-405 (HE) AEK-510 (HB)

Note;
Refer to page53 for
LINE VOLTAGE SELECTION.

RAM



1. RESISTORS:
Indicated in Ω, ⅛W, 1/8W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
▭ : Signal voltage at (33W + 33W 8Ω)output (1kHz)
▭ : DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

SWITCHES:

DISPLAY assembly
- S1504 POWER
- S1505 VIDEO
- S1507 FADE/FINE
- S1510 AI MEMO
- S1511 AI BGM
- S1512 PHONO
- S1513 2 REC MUTE
- S1514 DISCO
- S1516 SURR
- S1517 TAPE
- S1518 2 REC
- S1519 X2 COPY
- S1522 CD
- S1523 TX
- S1524 2 PAUSE
- S1525 X1 COPY
- S1528 DOLBY NR ON/OFF

1 MECHA SW assembly
- S1551 1 REV
- S1552 1 PLAY
- S1553 1 STOP
- S1554 1 REW
- S1555 1 FF

2 MECHA SW assembly
- S1556 2 STOP
- S1557 2 REV
- S1558 2 PLAY
- S1559 2 REW
- S1560 2 FF

3.2 DISPLAY (AWZ3350), 1 MECHA SW, 2 MECHA SW assembly, 1 MECHA UNIT (EXK2020) and 2 MECHA UNIT (EXK2010)

DISPLAY assembly (AWZ3350)

To AF assembly CN11 (To page 41)

To AF assembly CN10 (To page 41)

To AF assembly CN12 (To page 43)

IC1652: RESET

IC1651: DECK AMP CONTROL MICRO COMPUTER

IC1501 · IC1502 · Q1501 · Q1503-Q1509: LED DRIVE

IC1701 (1/2) · IC1702 · IC1703: B.P.F.

Q1601: 2 MECHA MOTOR CONTROL

Q1602: SWITCH

Q1603: 1 MECHA MOTOR CONTROL

Q1606 · Q1607: 1 MECHA SOLENOID

Q1608 · Q1609: 2 MECHA SOLENOID

Q1604 · Q1605 · Q1610 · Q1611: MECHA POWER SUPPLY

IC1704 · Q1701: SPEANA C

1 MECHA SW assembly

2 MECHA SW assembly

1 MECHA UNIT

2 MECHA UNIT

IC701 · 702	BA3812L
IC1704	LC7566
IC1652	M51951BSL
IC1505	PD3180A
IC1651	PD5147B
IC1701-1703	RC4558DXP
IC1502	SN74LS03N
IC1501	SN74LS05N
Q1501 · 1503 · 1504 · 1701	RN1201
Q1505-1507 · 1602 · 1605 ·	RN1203
Q1607 · 1609 · 1611	
Q1508 · 1509	RN2201
Q1601 · 1603	RN2204
Q1604 · 1606 · 1608 · 1610	2SA1515
D1518 · 1519	AEL1065
D1511-1516	AEL1108
D1505	AEL1119
D1506 · 1507	AEL1126
D1509	AEL1128
D1510	AEL1129
D1501-1504	AEL1130
D1517 · 1520 · 1537-1539 ·	1SS252
D1601-1615 · 1651-1657 ·	
D1659 · 1660 · 1701-1713	

To AF assembly CN12
(To page 43)

To AF assembly CN14
(To page 41)

PLAY
REC

IC1501, IC1502, Q1501, Q1503-Q1509 : LED DRIVE

IC1501

IC1502

IC702(2/2) : MIX

IC701, IC702 : GEQ CONTROL

IC701

IC702

IC1701(1/2), IC1702, IC1703 : B.P.F.

IC1704

IC1704, Q1701 : SPEANA CONTROL

Q1601 : 2 MECHA MOTOR CONTROL

Q1603 : 1 MECHA MOTOR CONTROL

0.6V
When the motor is activated 11.5V

Q1606, Q1607 : 1 MECHA SOLENOID
Q1608, Q1609 : 2 MECHA SOLENOID

R SUPPLY

VR701-VR710 : ACU1034

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 (E)	or	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

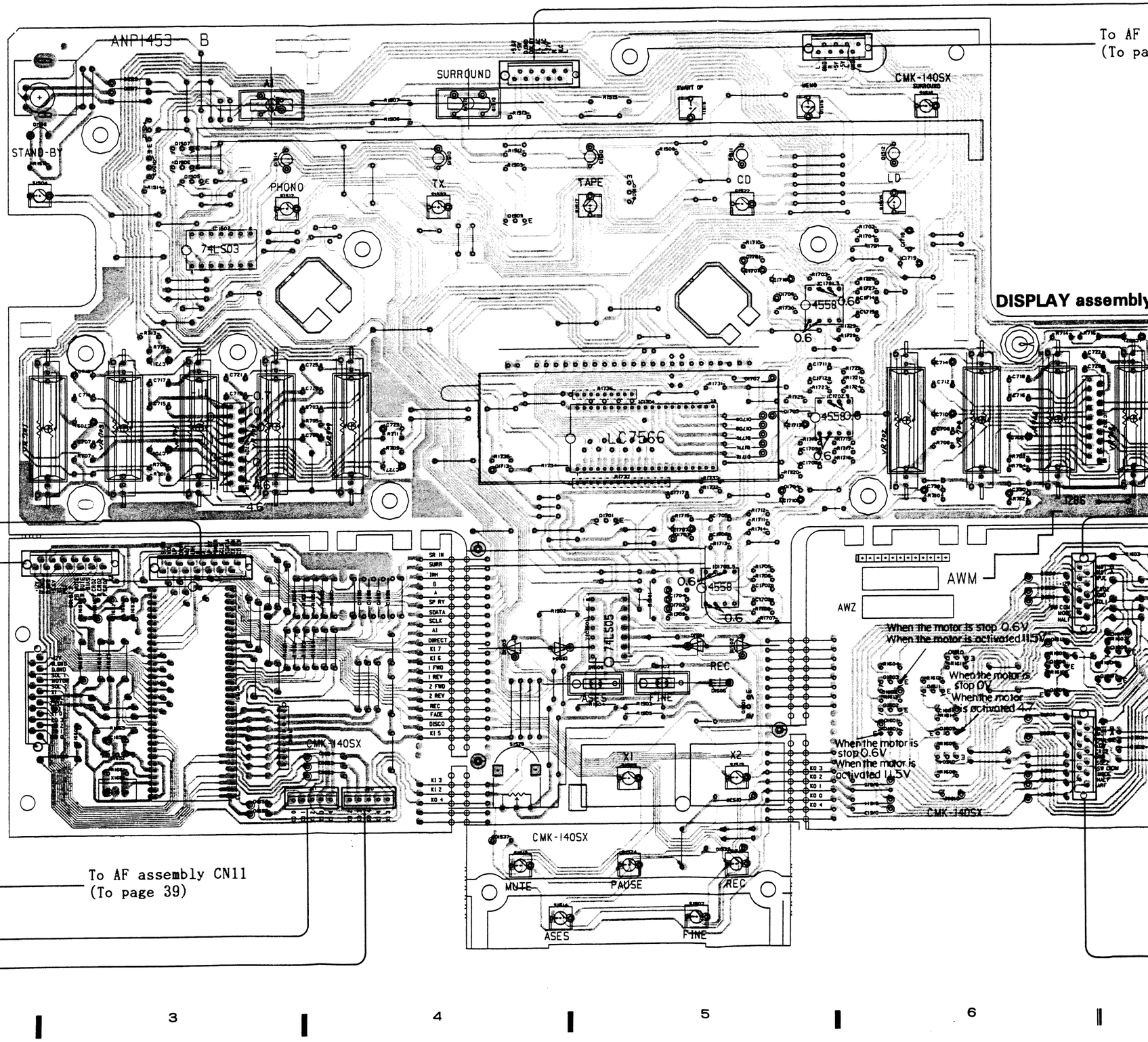
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

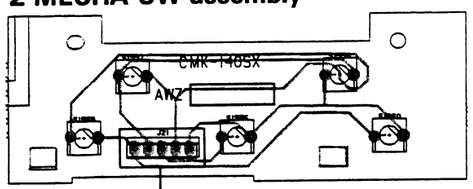
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

Q1503-Q1507 IC1502 IC701 IC1652 IC1651 Q1509 Q1508 Q1701 IC1704 IC1501 IC1703 Q1501 IC1701 IC1702 Q1601-Q1605 IC702 Q1606-Q1611

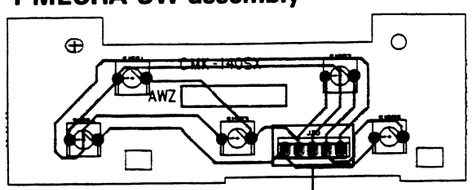
VR701 VR703 VR705 VR707 VR709 VR702 VR704 VR706 VR708



2 MECHA SW assembly



1 MECHA SW assembly



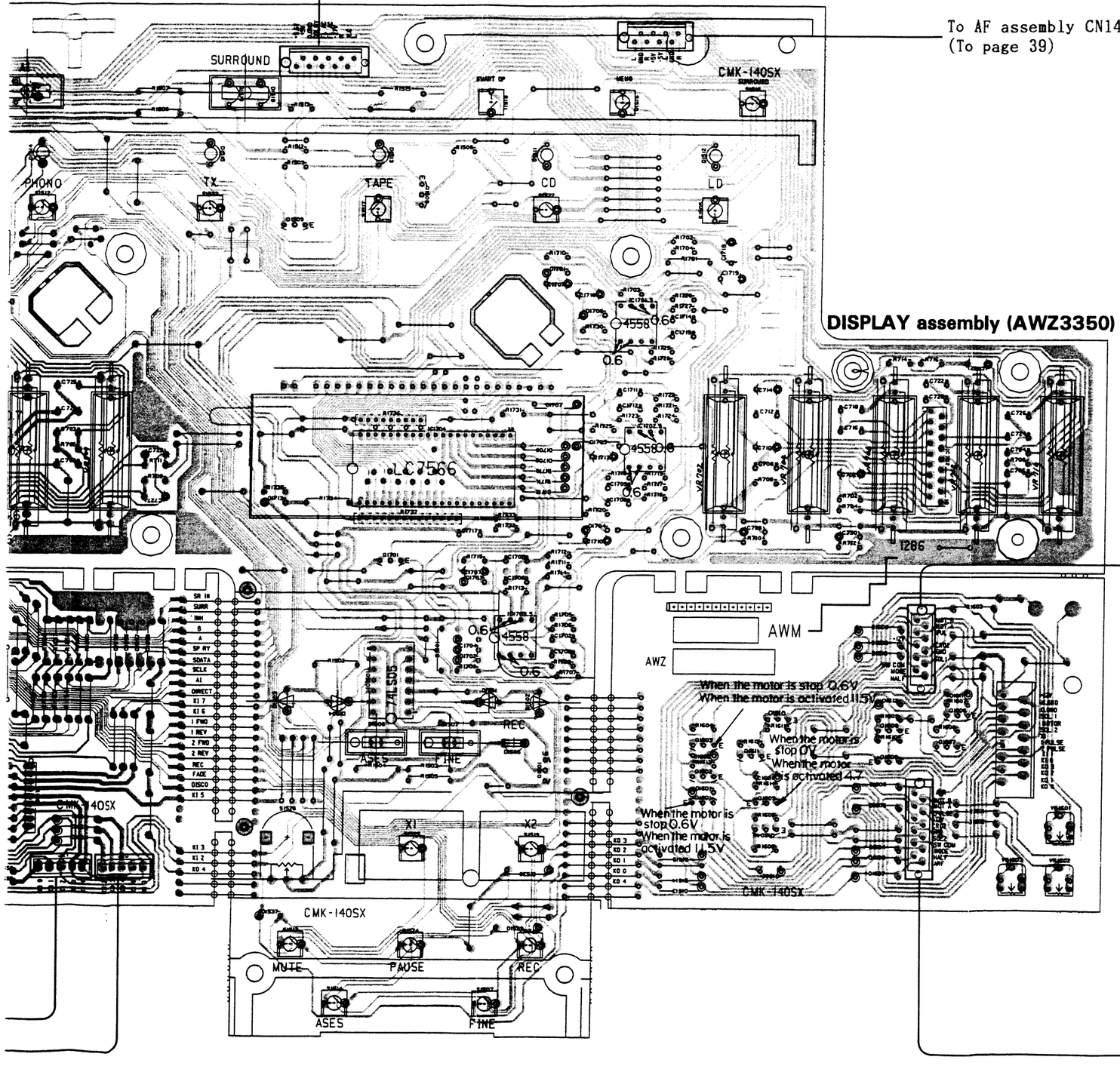
4 5 6 7 8

1502 Q1509 Q1508 IC1701
01 Q1701 IC1704 IC1703 IC1702 IC702
IC1501 Q1501 Q1601-Q1605 Q1606-Q1611

VR707 VR709 VR702 VR704 VR706 VR708 VRI601-VRI603 VR710

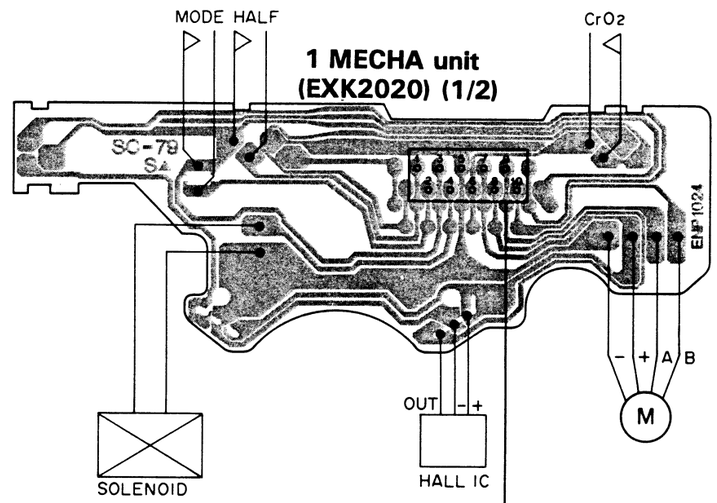
To AF assembly CN12
(To page 39)

To AF assembly CN14
(To page 39)

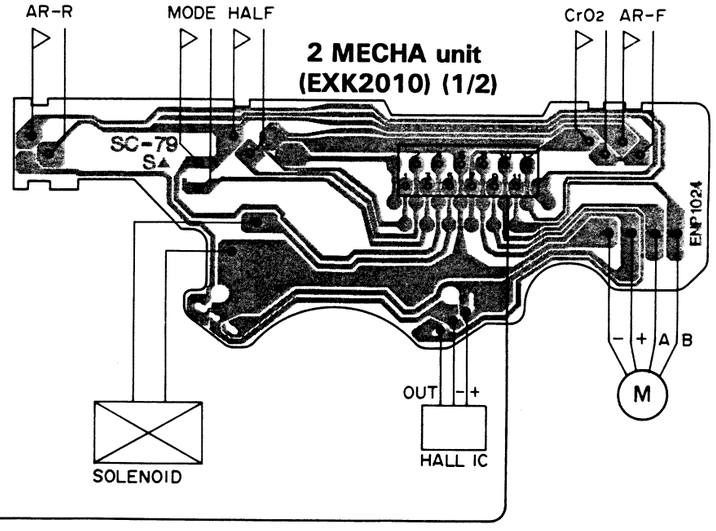


DISPLAY assembly (AWZ3350)

1 MECHA unit (EXK2020) (1/2)

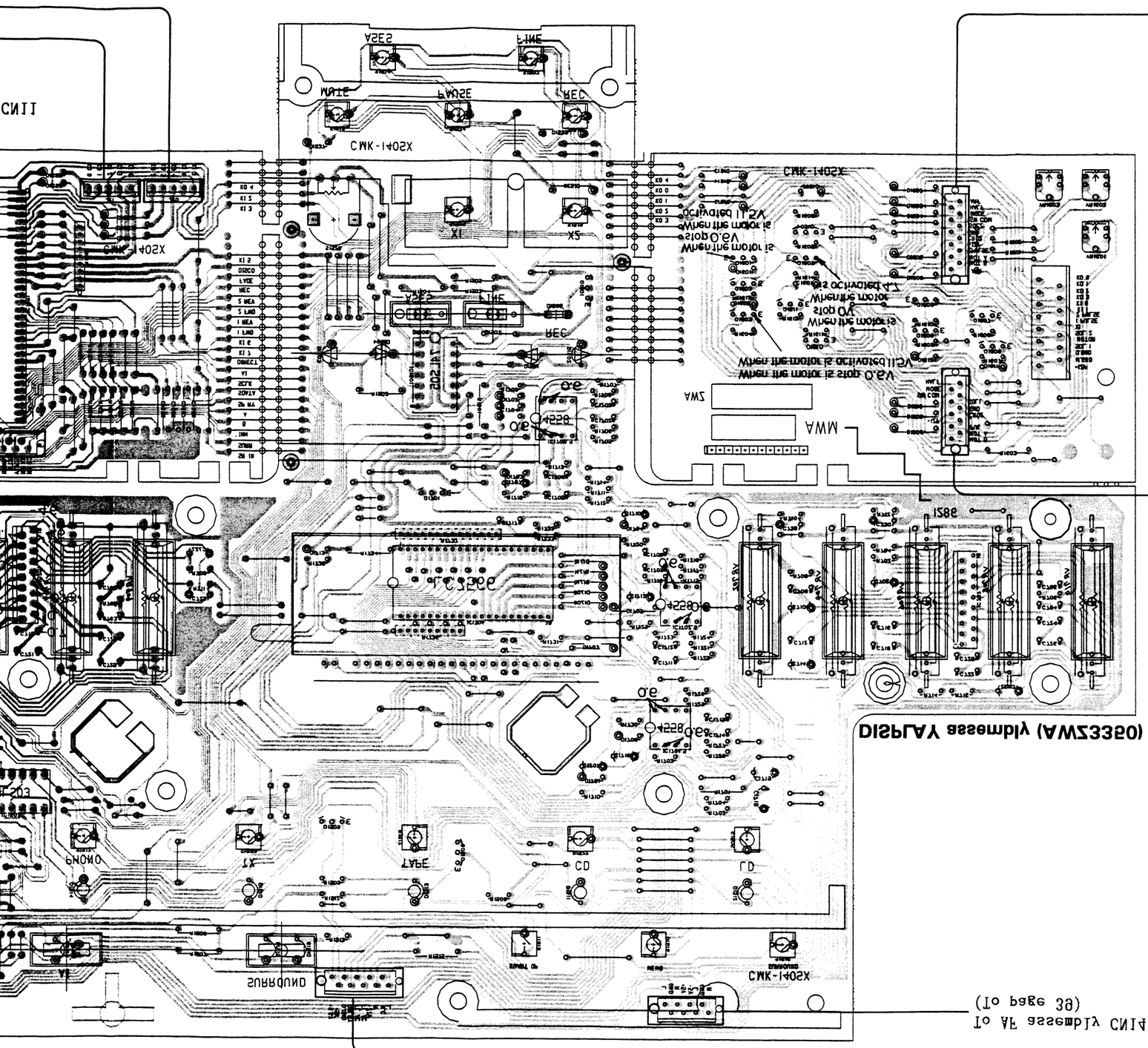


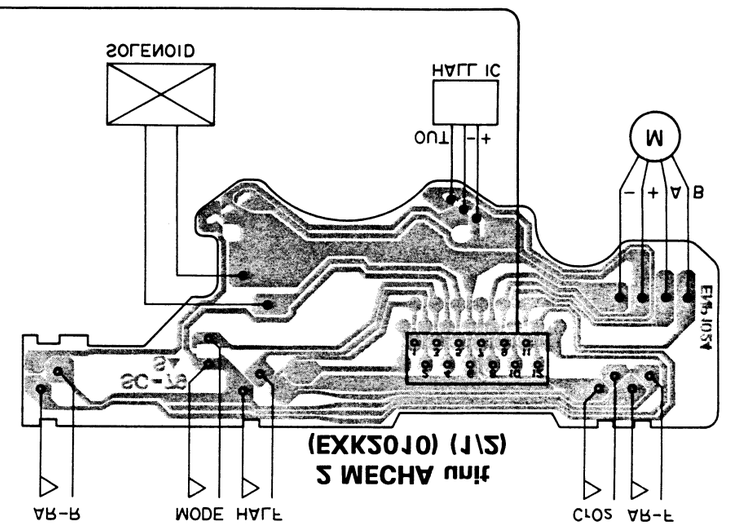
2 MECHA unit (EXK2010) (1/2)

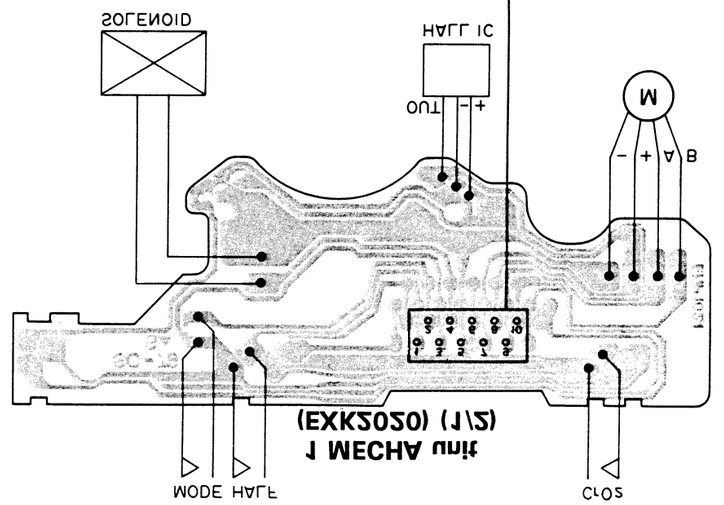


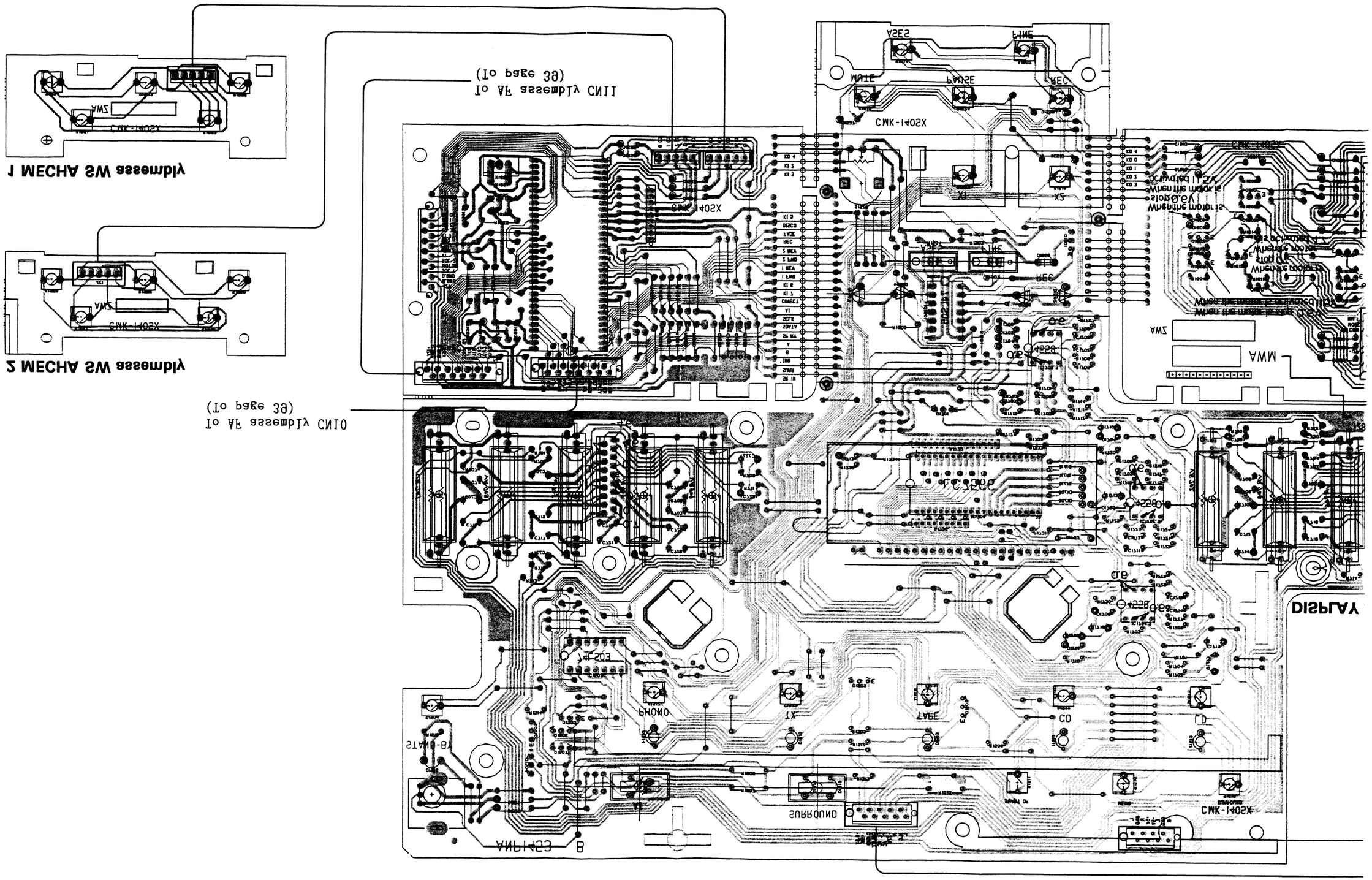
A B C D

4 5 6 7 8 9

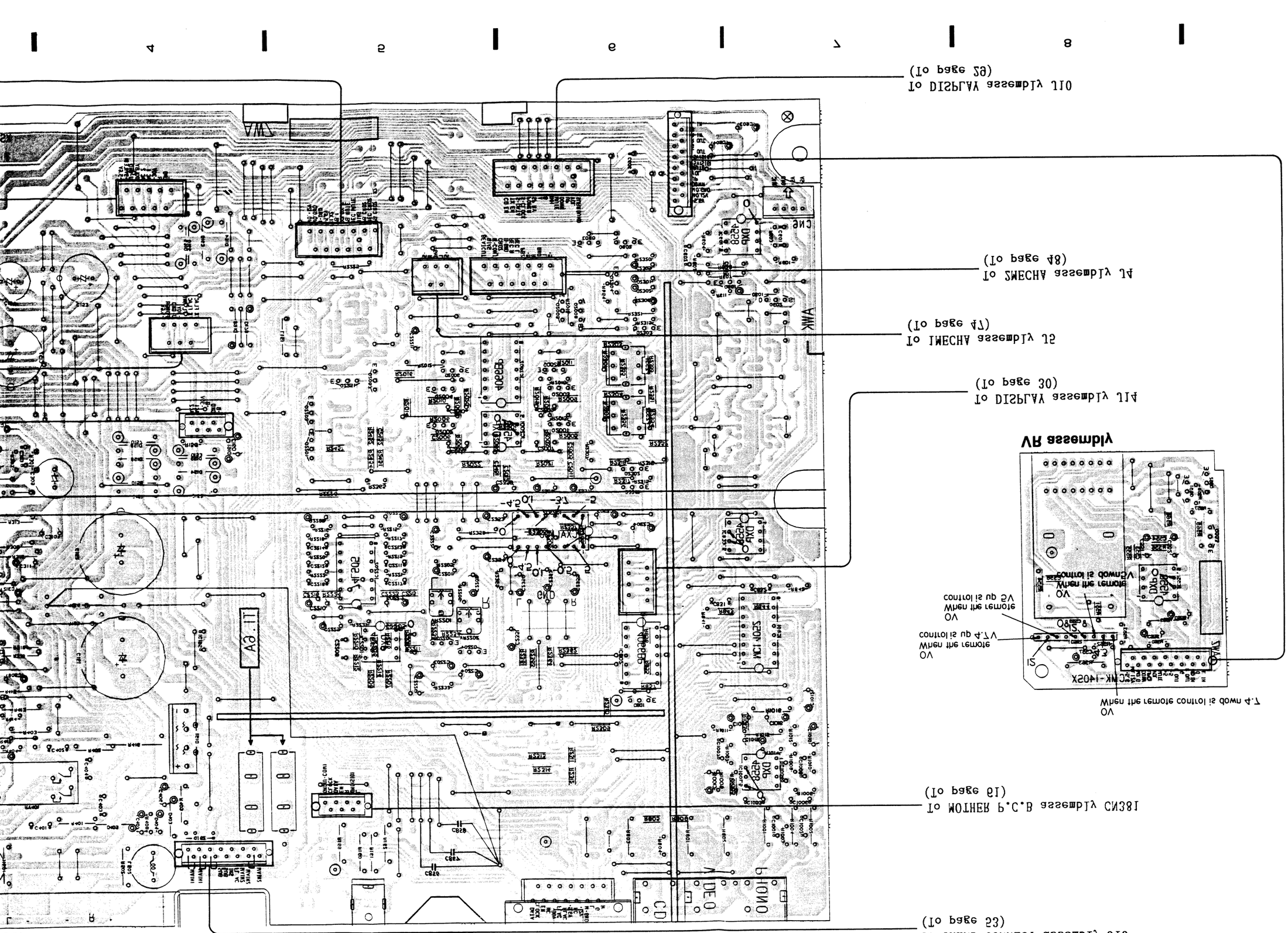

CMK-1402X
DISPLAY assembly (AWZ3320)
To AF assembly CN14
(To page 38)
To AF assembly CN15
(To page 38)
SUBGND


SOLENOID
HALL IC
OUT
M
MODE
HALF
CLOS
(EXK5050) (J\S)
S MECHA unit


SOLENOID
HALL IC
OUT
M
MODE
HALF
CLOS
(EXK5050) (J\S)
J MECHA unit



This P.C.B. connection diagram is viewed from the foil side.


To DISPLAY assembly OLL
(To page 25)
To MECHA assembly AL
(To page 18)
To MECHA assembly SL
(To page 17)
To DISPLAY assembly ALL
(To page 30)
RV assembly
To MOTHER P.C.B assembly CN181
(To page 19)
To TRANS CONNECT assembly SLS
(To page 23)
CMK-1402X
VO
Turn the remote control is down
VO
Turn the remote control is up
VO
Turn the remote control is up
VO
Turn the remote control is down

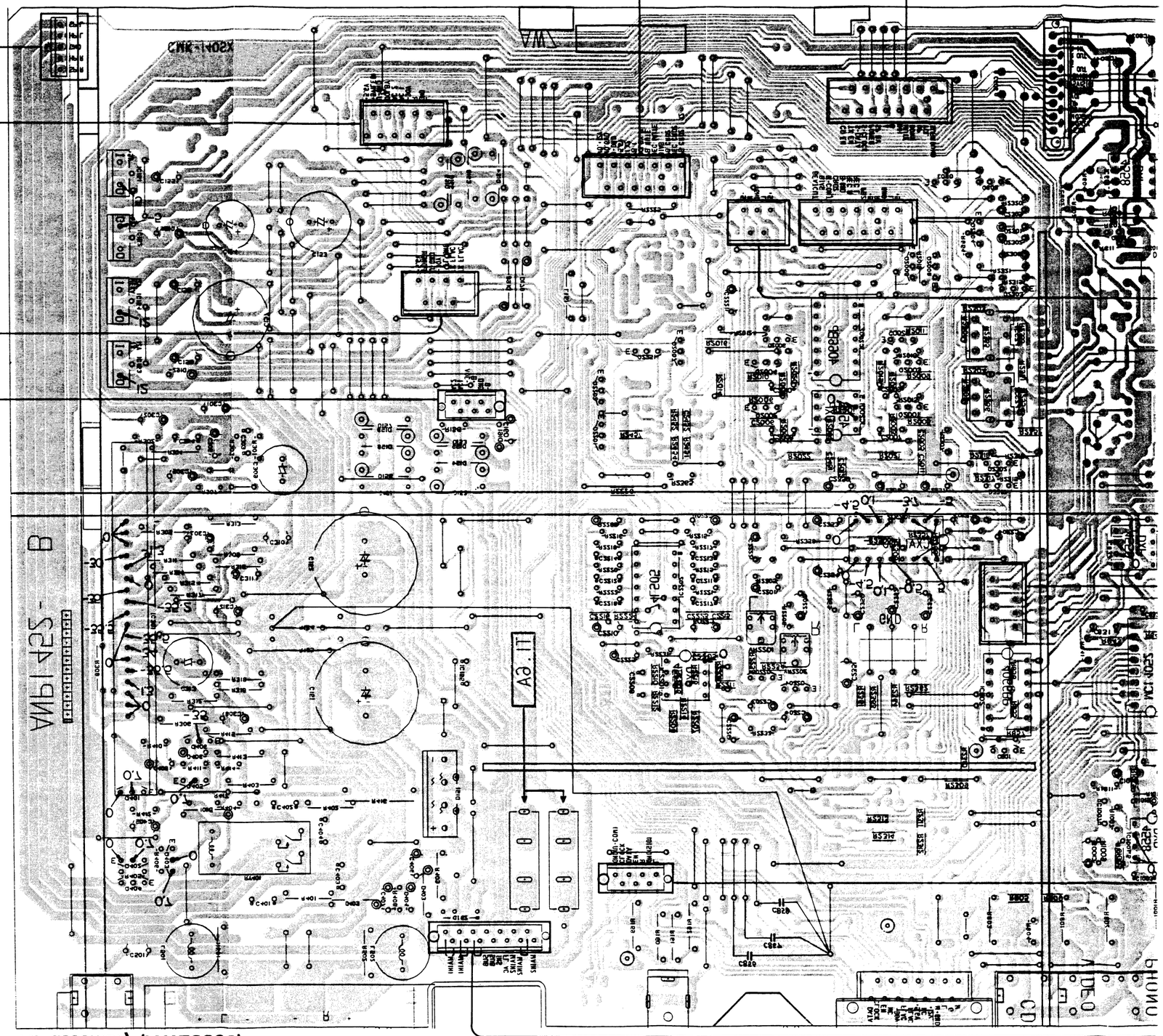
To DISPLAY assembly CN1
(To page 25)

To DISPLAY assembly CN2
(To page 30)

HEAD PHONE assembly

To SUB TRANS assembly CN16
(To page 24)

To MOTHER PCB assembly CN1
(To page 18)



AT assembly (SWZ3333)

3.3 AF (AWZ3333), HEAD PHONE and VR assembly

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 (E B C)	E B C or E B C	Transistor
Q215 (B C E)	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

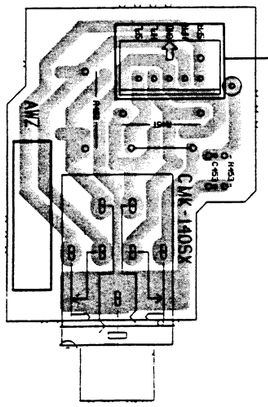
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

To MOTHER PCB assembly CN1 (To page 61)

To SUB TRANS assembly CN16 (To page 54)

To DISPLAY assembly J12 (To page 30)

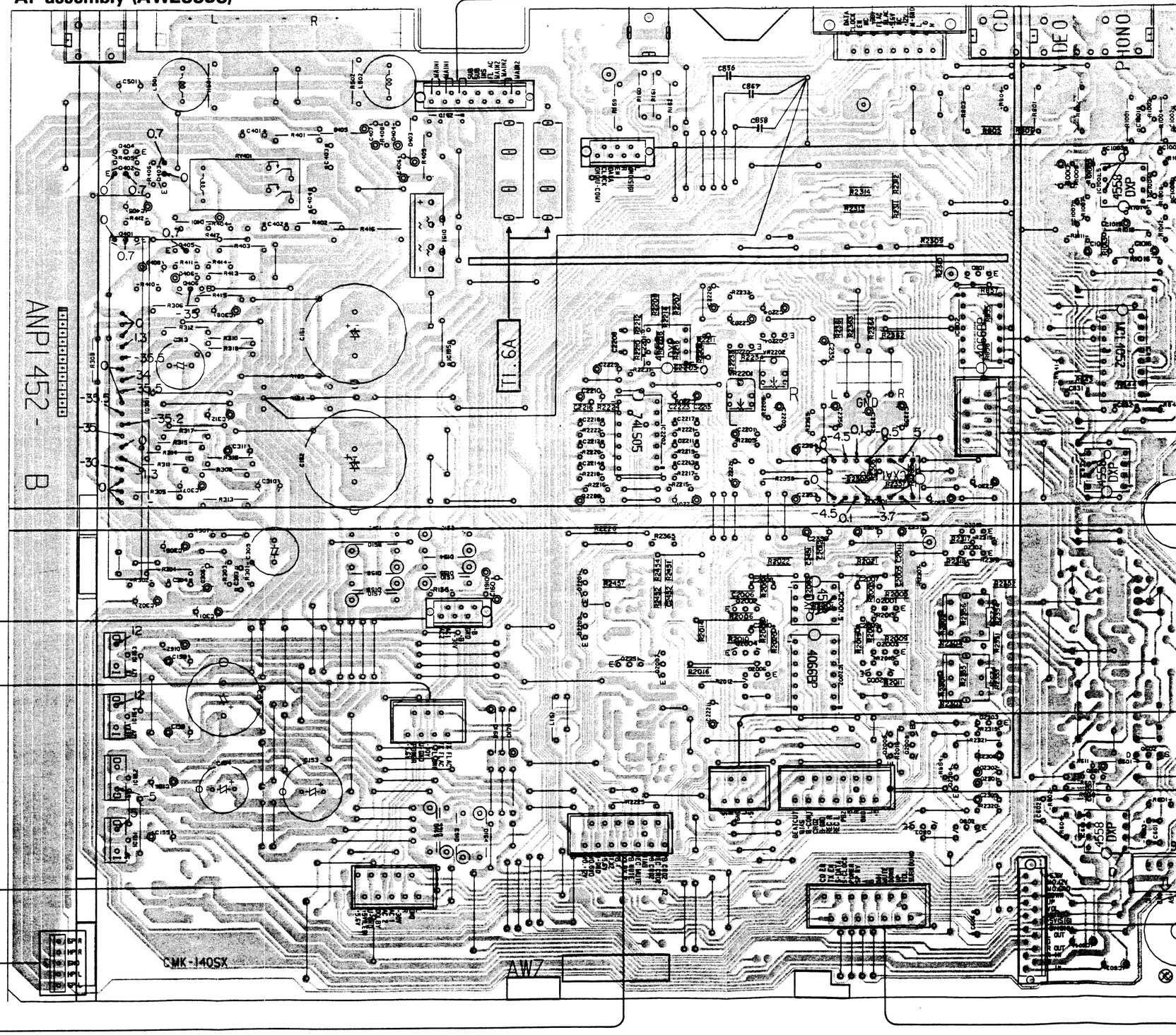
HEAD PHONE assembly



To DISPLAY assembly J11 (To page 29)

Q401-Q406
IC301
IC153 IC154
IC152 IC151
IC155
IC2202 IC2201 Q2203 Q2204
Q2201 Q2202 Q2351 Q2007
IC2302
Q2001-Q2009 IC2001
IC2002 Q803 Q802
Q801
IC802
Q2301-Q2304
IC1001
IC833 IC801
Q601 Q602
IC601
VR2201 VR2202

AF assembly (AWZ3333)



IC155

IC2202 IC2201 Q2203 Q2204 IC2302 Q801 IC802 IC1001 IC833 IC801

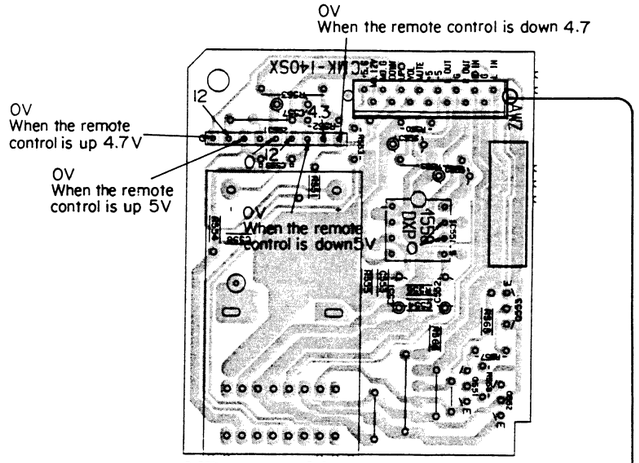
Q2201 Q2202 Q2351 Q2007 Q2001-Q2009 IC2001 Q2301-Q2304 Q601 Q602

IC2002 Q803 Q802 IC601

VR2201 VR2202

To TRANS CONNECT assembly J15
(To page 53)

To MOTHER P.C.B assembly CN381
(To page 61)


0V
When the remote control is down 4.7
0V
When the remote control is up 4.7V
0V
When the remote control is up 5V
0V
When the remote control is down 5V

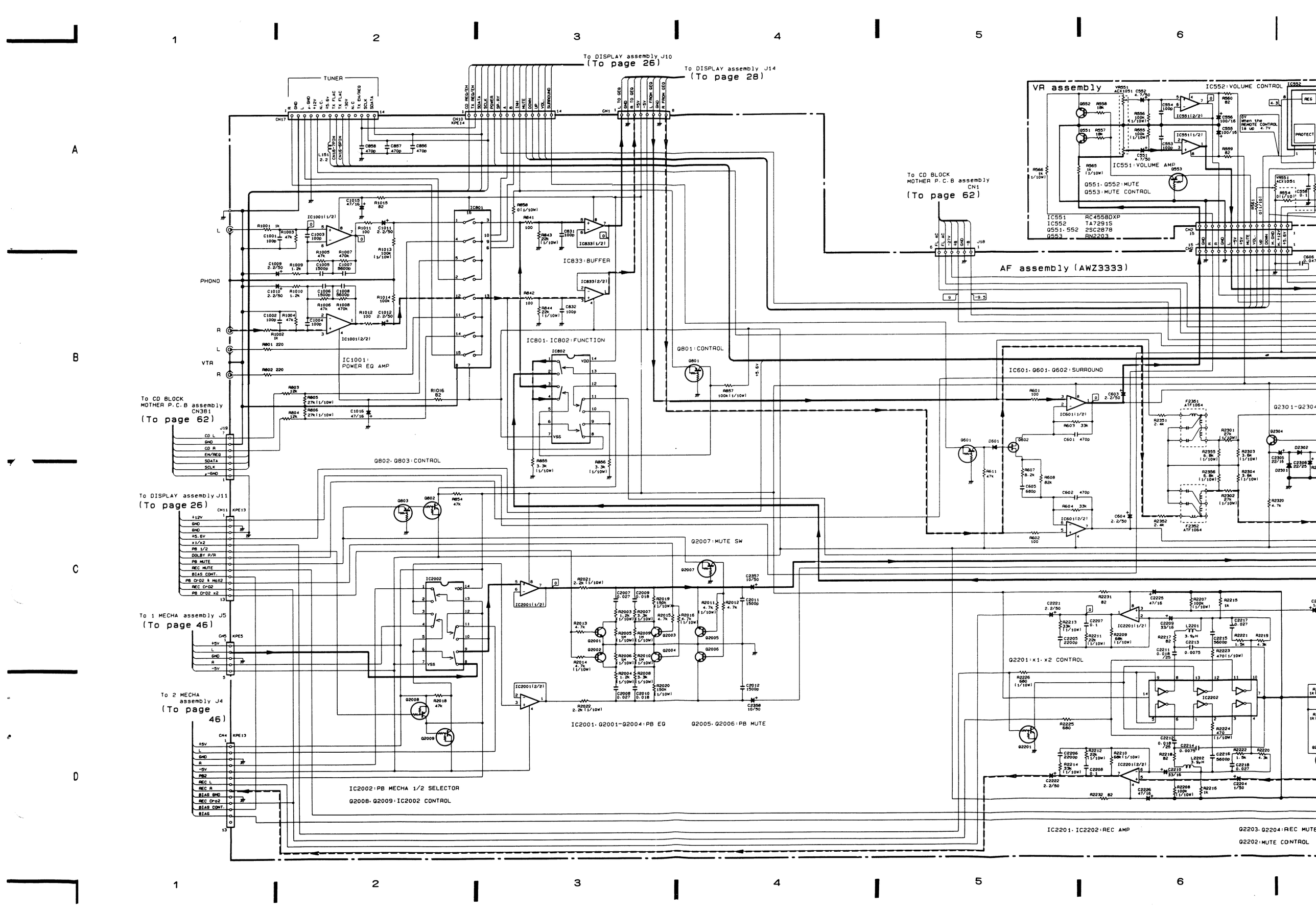
VR assembly

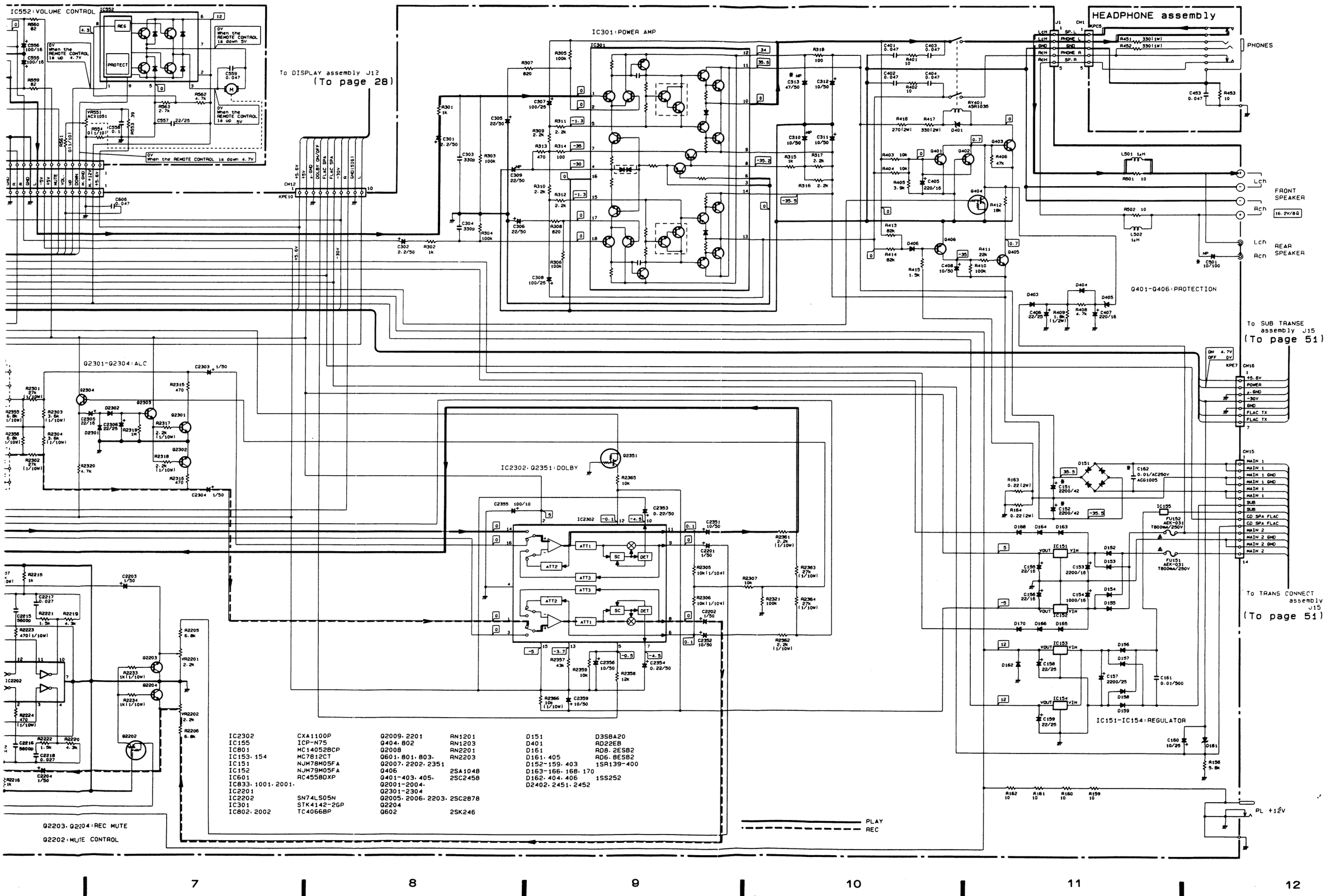
To DISPLAY assembly J14
(To page 30)

To 1MECHA assembly J5
(To page 47)

To 2MECHA assembly J4
(To page 48)

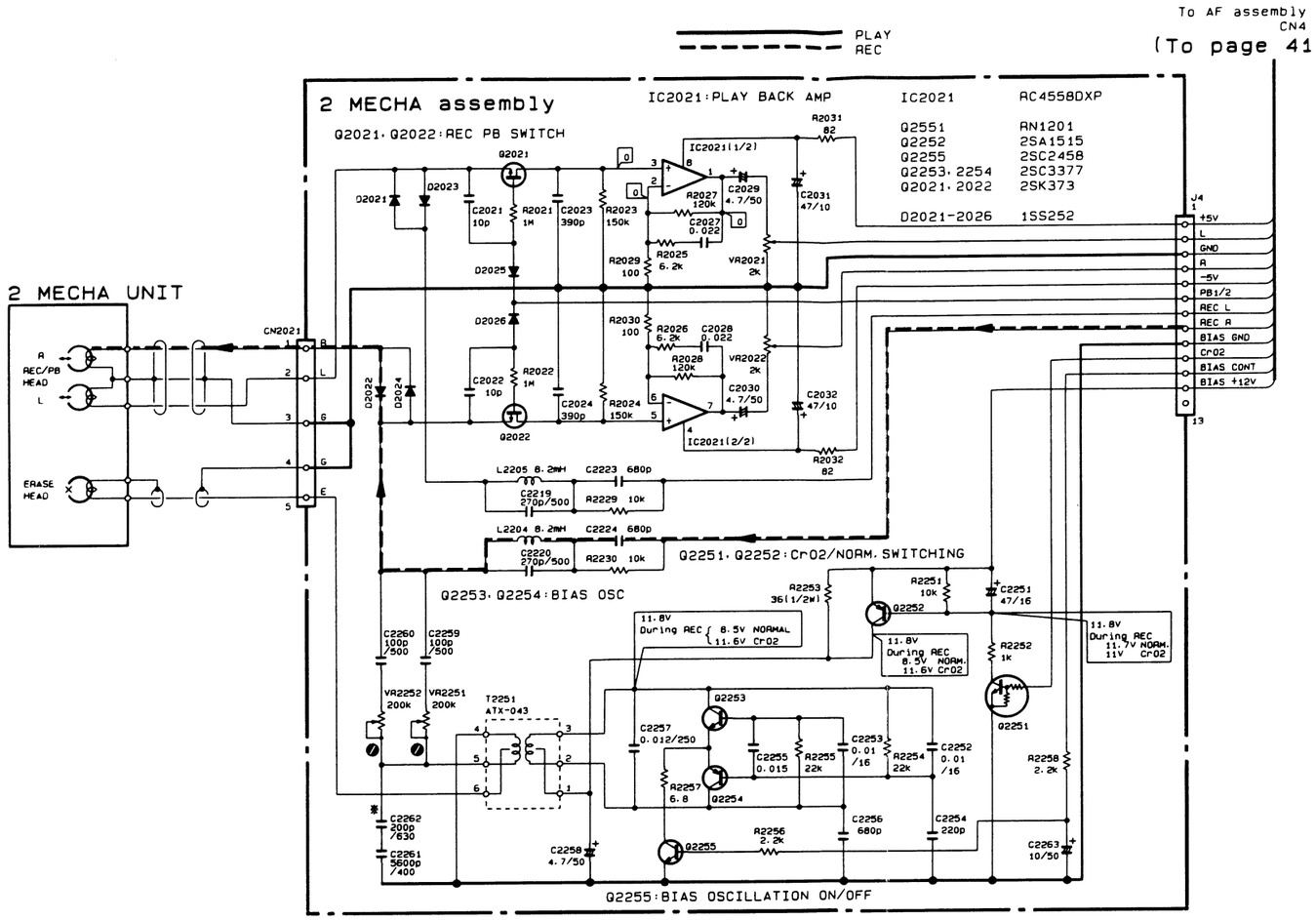
To DISPLAY assembly J10
(To page 29)

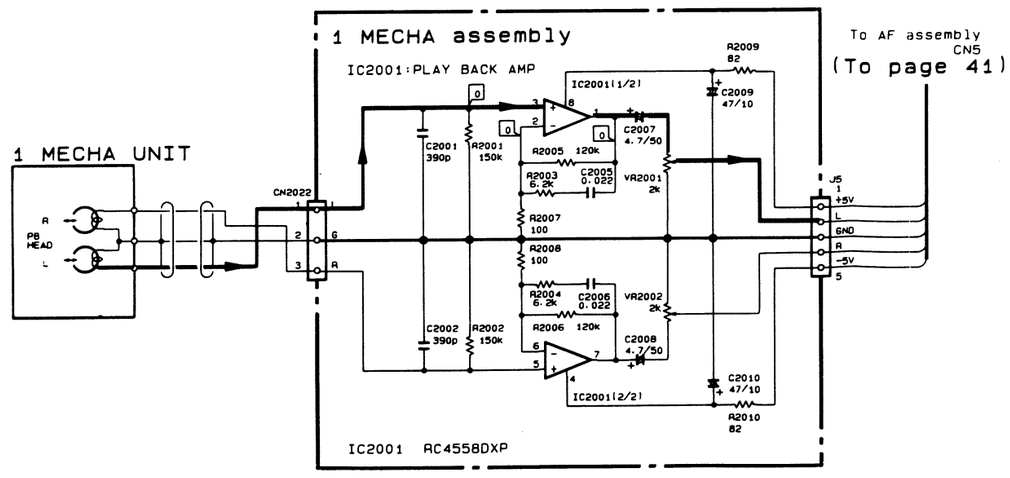

To DISPLAY assembly J10
(To page 26)
To DISPLAY assembly J14
(To page 28)
TUNER
VR assembly
IC552:VOLUME CONTROL
IC551:VOLUME AMP
Q551:Q552:MUTE
Q553:MUTE CONTROL
IC551 RC4558DXP
IC552 TA7291S
Q551.552 2SC2878
Q553 RN2203
To CD BLOCK
MOTHER P.C.B assembly
CN1
(To page 62)
AF assembly (AWZ3333)
IC1001:
POWER EQ AMP
IC833:BUFFER
IC801.IC802:FUNCTION
Q801:CONTROL
IC601.Q601.Q602:SURROUND
To CD BLOCK
MOTHER P.C.B assembly
CN381
(To page 62)
Q802.Q803:CONTROL
Q2007:MUTE SW
Q2201:x1.x2 CONTROL
To DISPLAY assembly J11
(To page 26)
To 1 MECHA assembly J5
(To page 46)
To 2 MECHA
assembly J4
(To page
46)
IC2002:PB MECHA 1/2 SELECTOR
Q2008.Q2009:IC2002 CONTROL
IC2001.Q2001-Q2004:PB EQ
Q2005.Q2006:PB MUTE
IC2201.IC2202:REC AMP
Q2203.Q2204:REC MUTE
Q2202:MUTE CONTROL



IC2302	CXA1100P	Q2009·2201	AN1201	D151	D3SBA20
IC155	ICP-N75	Q404·802	AN1203	D401	RD22EB
IC801	MC14052BCP	Q2008	AN2201	D161	RD8.2ESB2
IC153·154	MC7812CT	Q601·801·803·	AN2203	D161·405	RD6.8ESB2
IC151	NJM78M05FA	Q2007·2202·2351		D152-159·403	1SR139-400
IC152	NJM79M05FA	Q406	2SA1048	D163-166·168·170	
IC601	RC4558DXP	Q401-403·405·	2SC2458	D162·404·406	1SS252
IC833·1001·2001·		Q2001-2004·		D2402·2451·2452	
IC2201		Q2301-2304			
IC2202	SN74LS05N	Q2005·2006·2203·	2SC2878		
IC301	STK4142-2GP	Q2204			
IC802·2002	TC4066BP	Q602	2SK246		

3.4 1 MECHA and 2 MECHA assembly





NOTE

1. This P.C.B con
2. The parts whi with the corres

P.C.B. pattern diag

ANP1456-B

NOTE

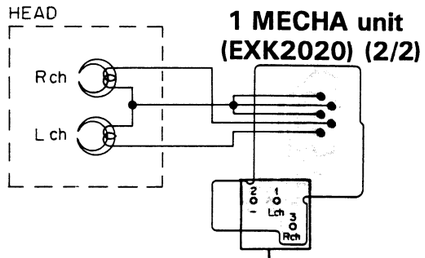
1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

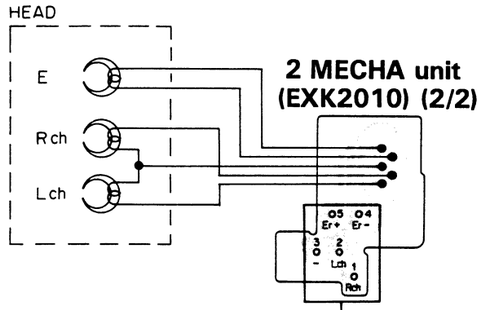
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 E	E or E	Transistor
Q215	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513	+	Capacitor (Polarity)
C518		Capacitor (Non-polarity)

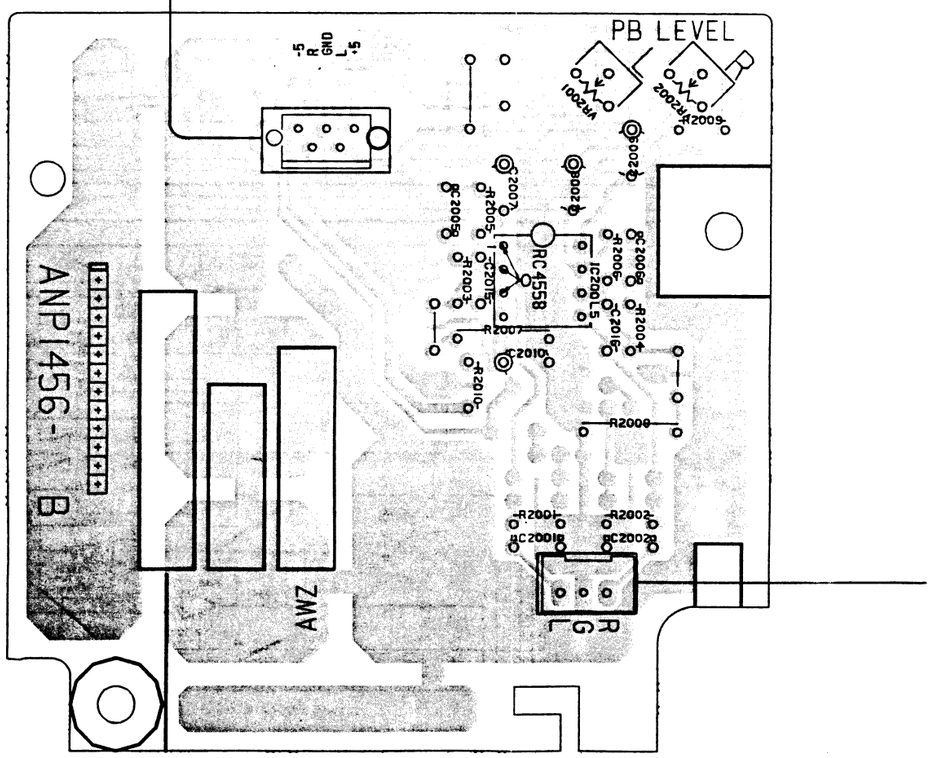
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

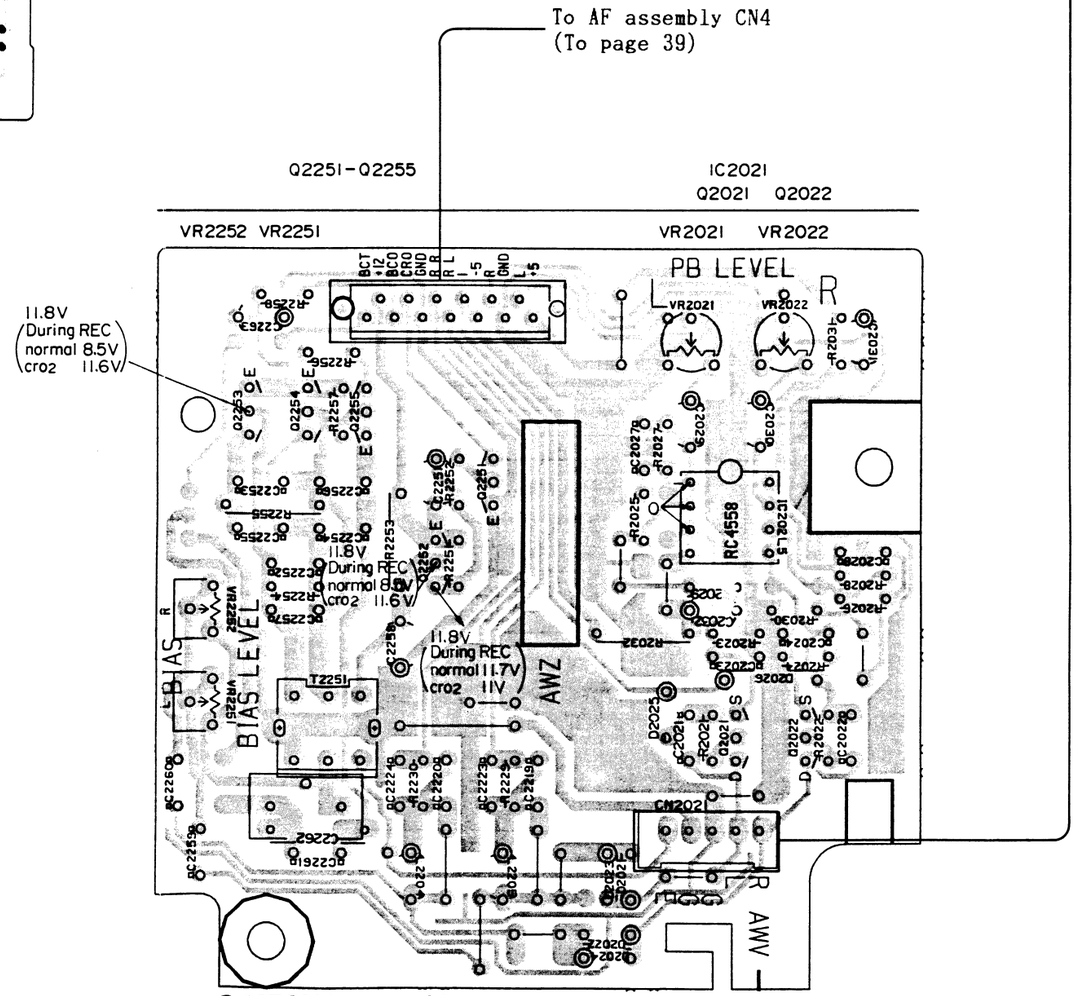
3. The capactor terminal marked with ◎(double circles) shows negatine termianl.
4. The diode terminal marked with ◎(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.





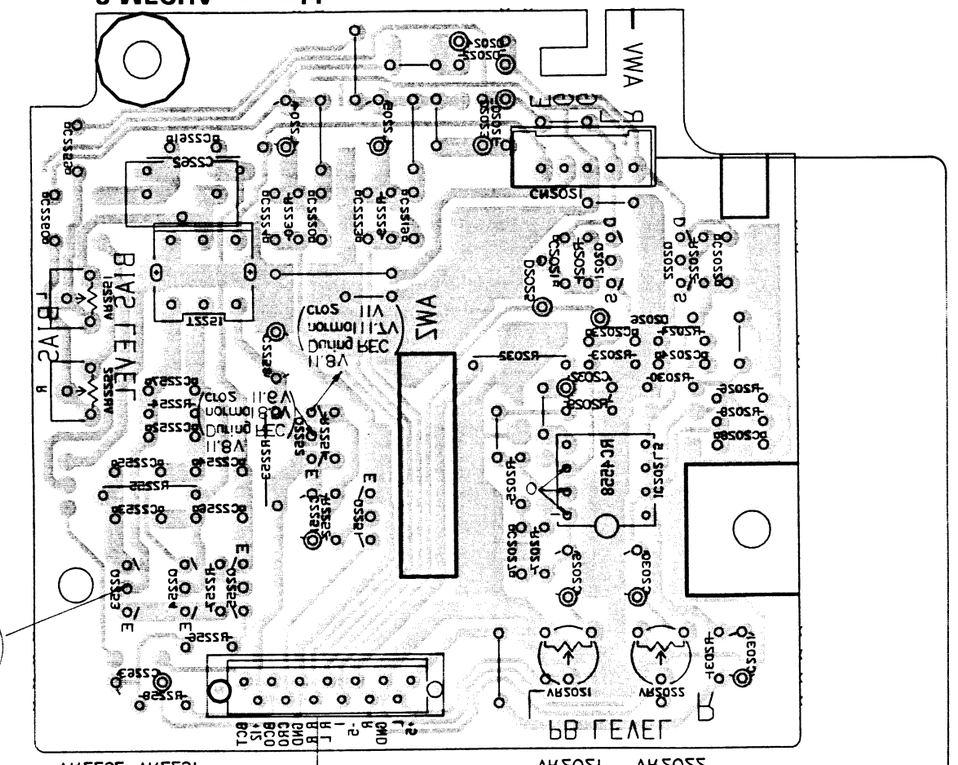


1 MECHA assembly

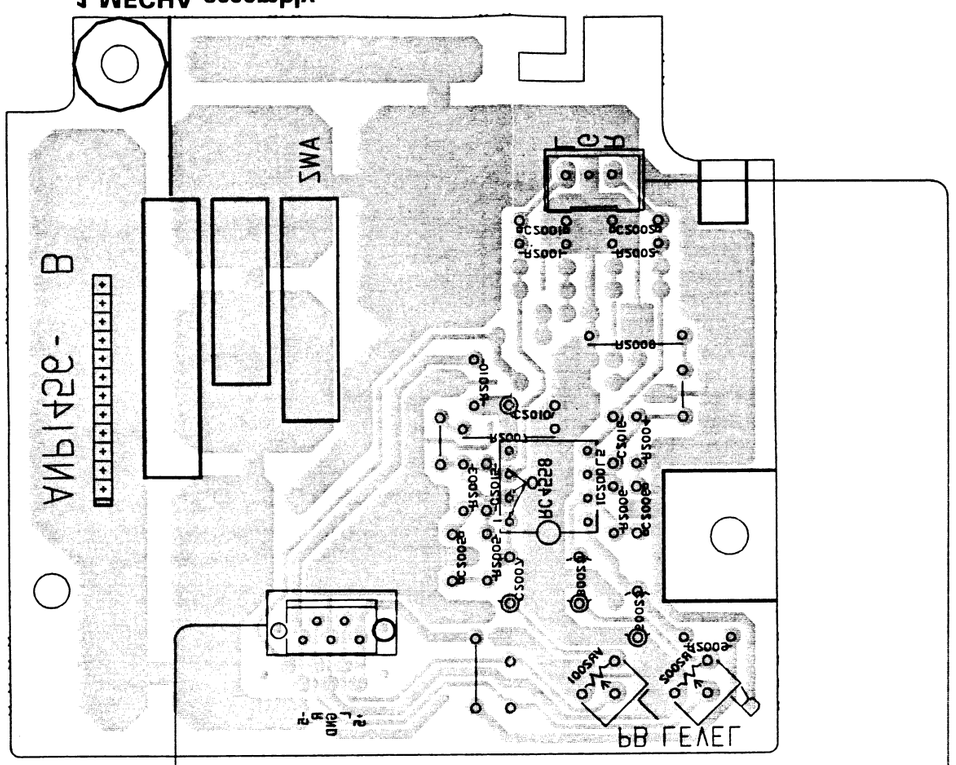


2 MECHA assembly

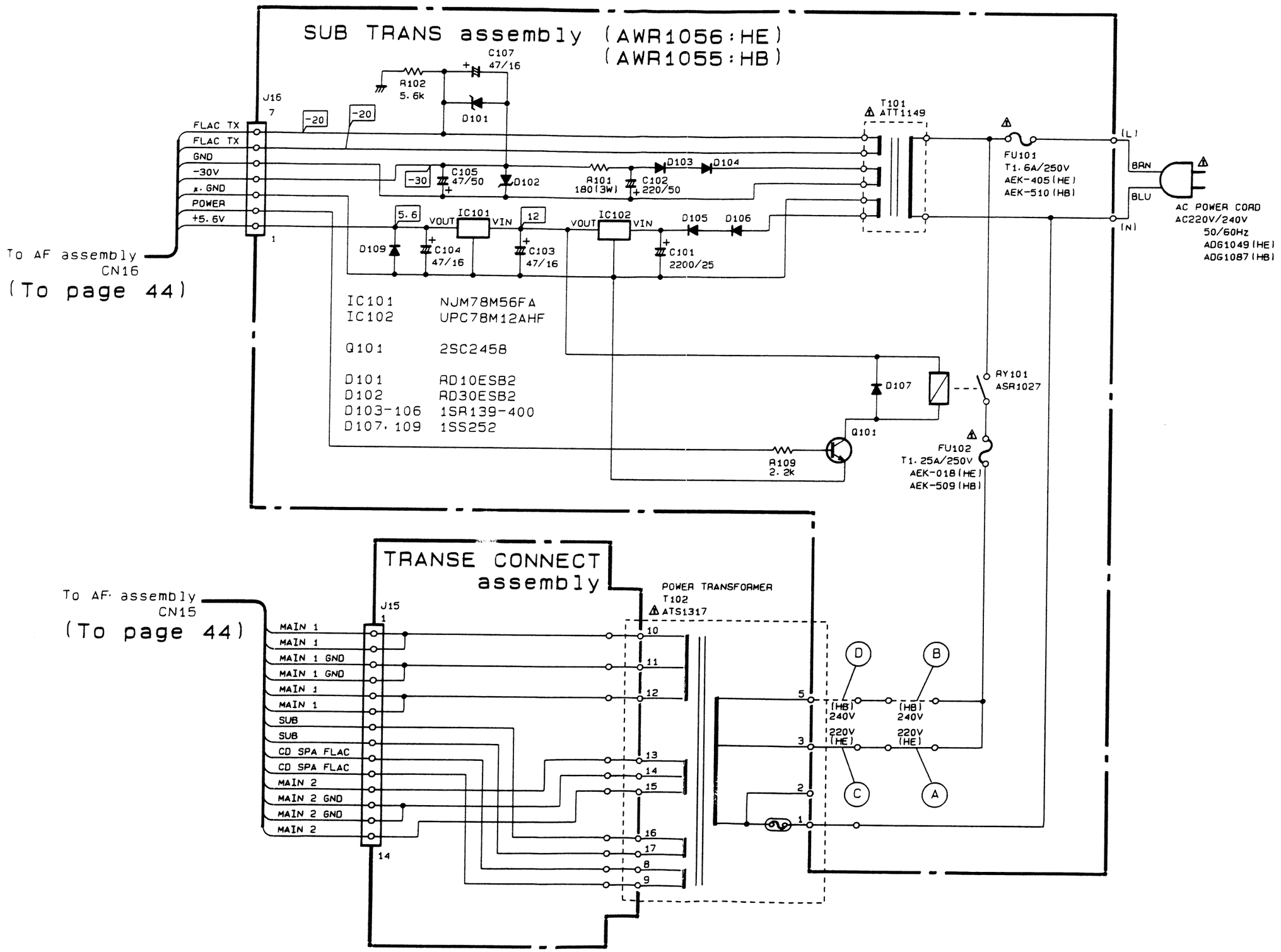
S MECHA assembly



F MECHA assembly



3.5 SUB TRANS (AWR1056) and TRANS CONNECT assembly



Line Voltage Selection
(For HE, HB and HEWZIW types)

Line voltage can be changed with the following steps.

1. Disconnect the AC Power cord.
2. Remove the top cover.
3. Change the position of the jumper wires (A) – (D) as follows ;

Jumper wire \ Voltage	220V	240V
(A)	○	×
(B)	×	○
(C)	○	×
(D)	×	○

○ : Be needed
× : Be needless

4. Stick the line voltage label on the rear panel.

Description	Part No.
220V lavel	AAX-193
240V label	AAX-192

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

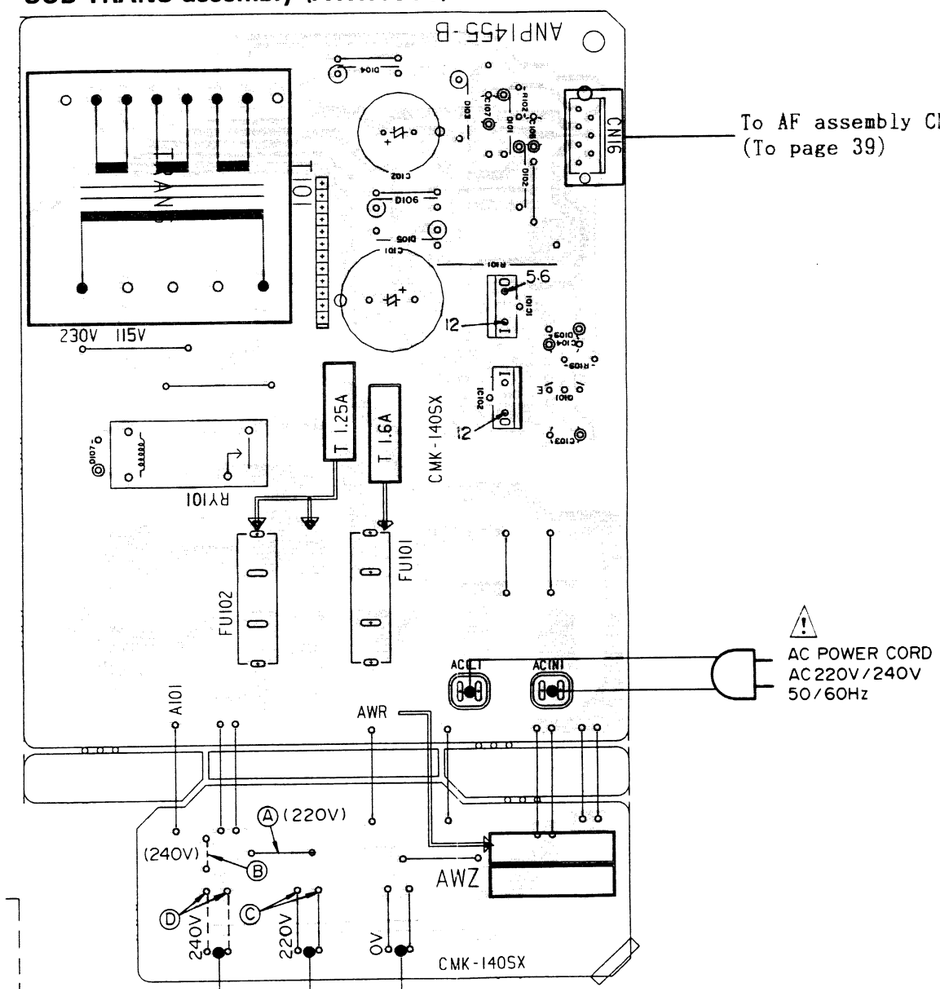
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504 (E B C)	or	Transistor
Q215 (E B C)	or	Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

Others

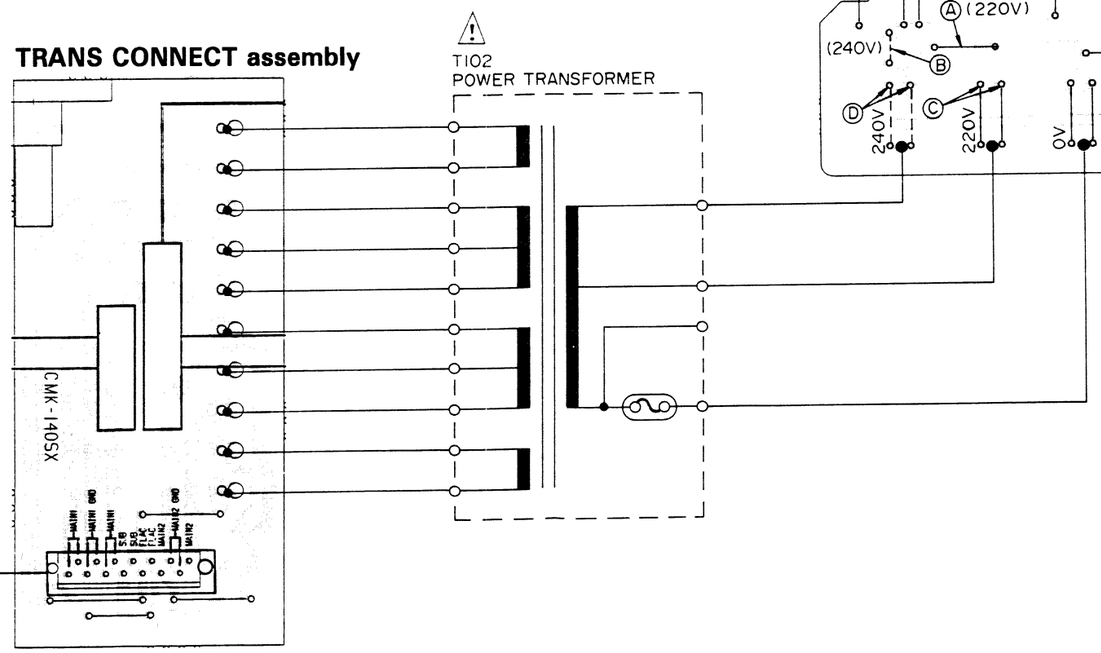
P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

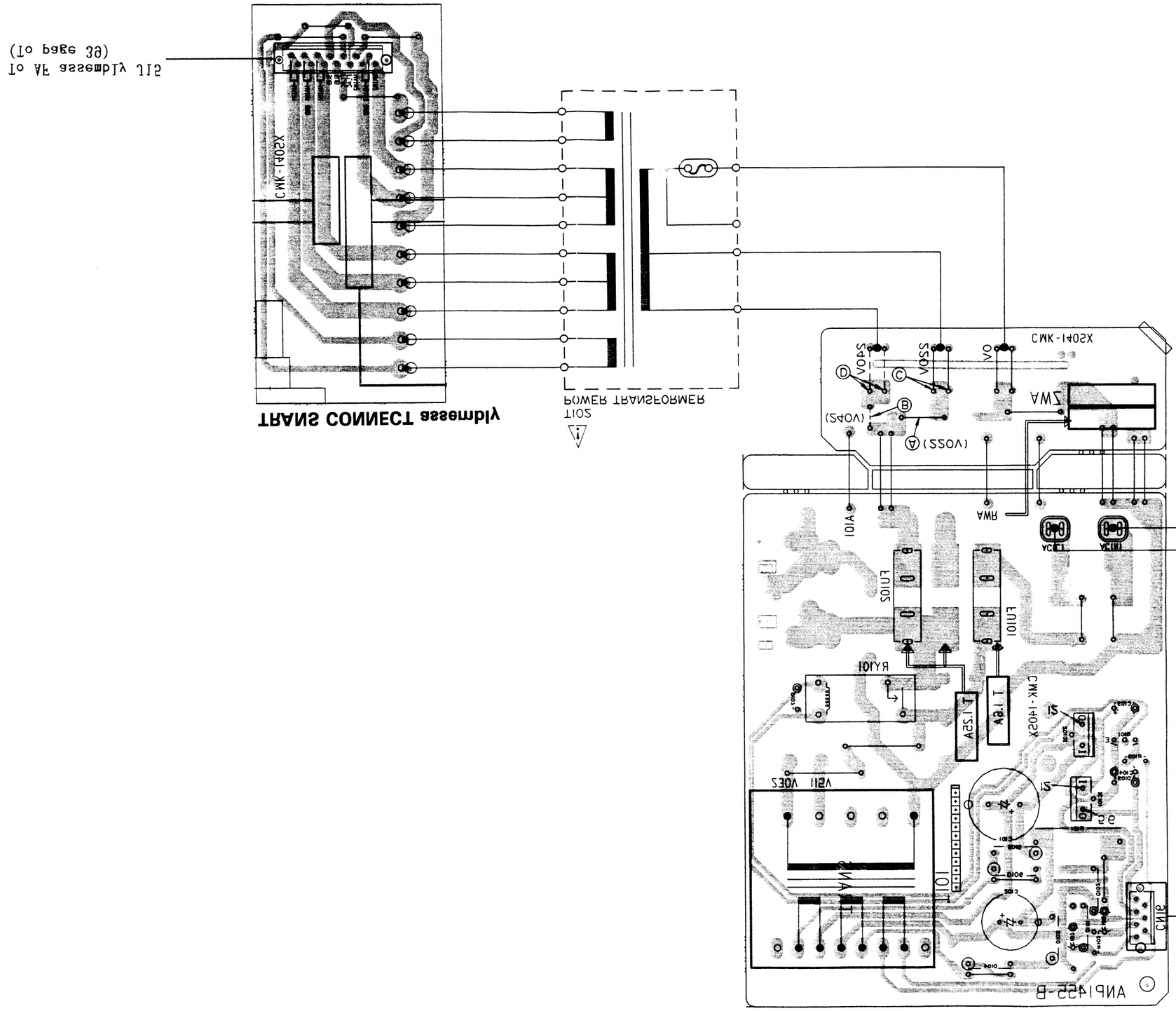
3. The capactor terminal marked with ⊖(double circles) shows negatine termianl.
4. The diode terminal marked with ⊖(double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

SUB TRANS assembly (AWR1056)

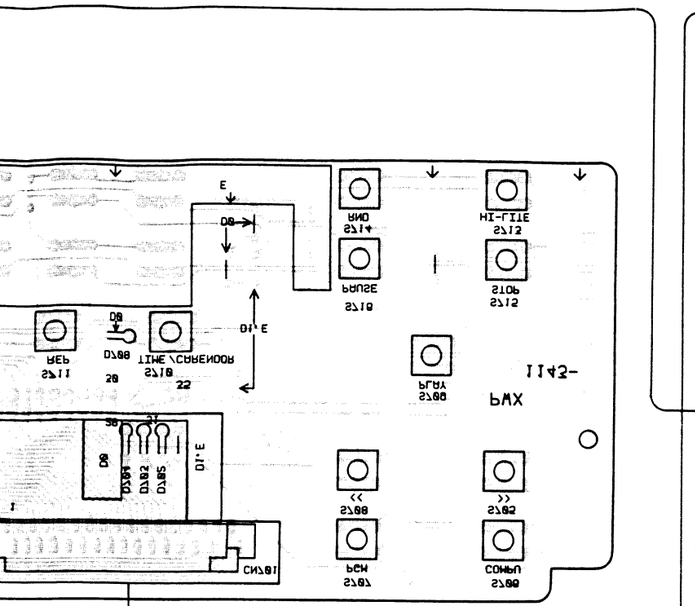


TRANS CONNECT assembly

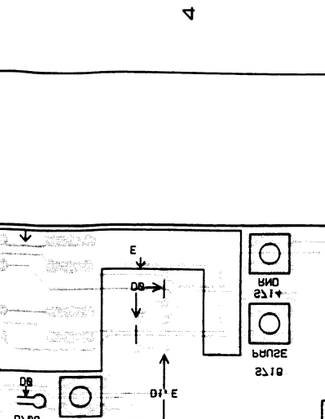


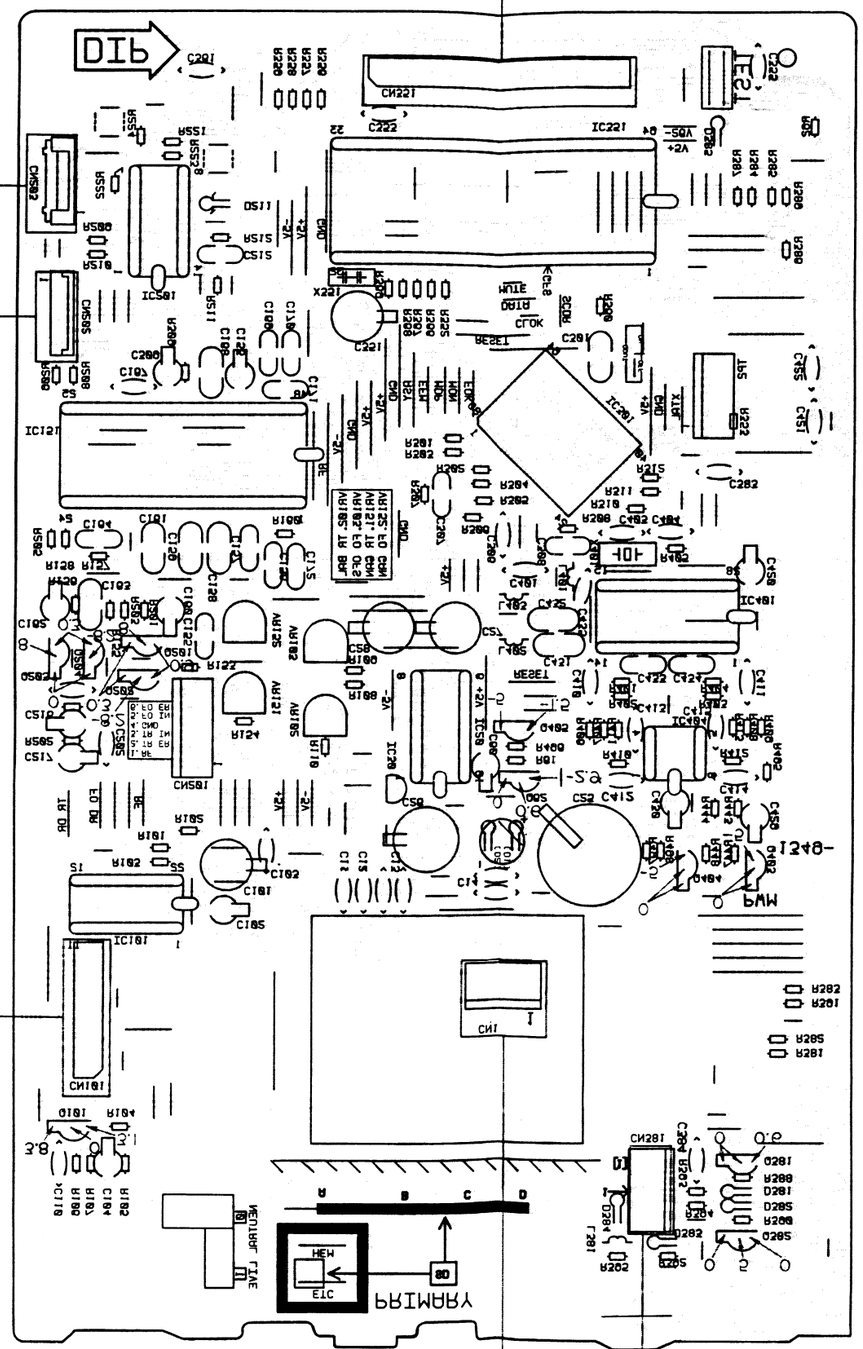

To AF assembly ILS
(To page 9E)
CMK-1402X
TRANS CONNECT assembly
POWER TRANSFORMER
T10S
CMK-1402X
VO
VSS
VO4S
VO1
(VSS)A
(VO4S)B
ZWA
RWA
VO1A
AC POWER CORD
AC VOSS\VO4S
AC VO\VO4S
FU10S
FU10I
RY10I
AC1.5T
A5A.1T
CMK-1405X
VSII VOE2
10IT
CN1S
To AF assembly CN1S
(To page 9E)
SUB TRANS assembly (AWR1050)

XD-Z5AT



MECHA P.C.B assembly





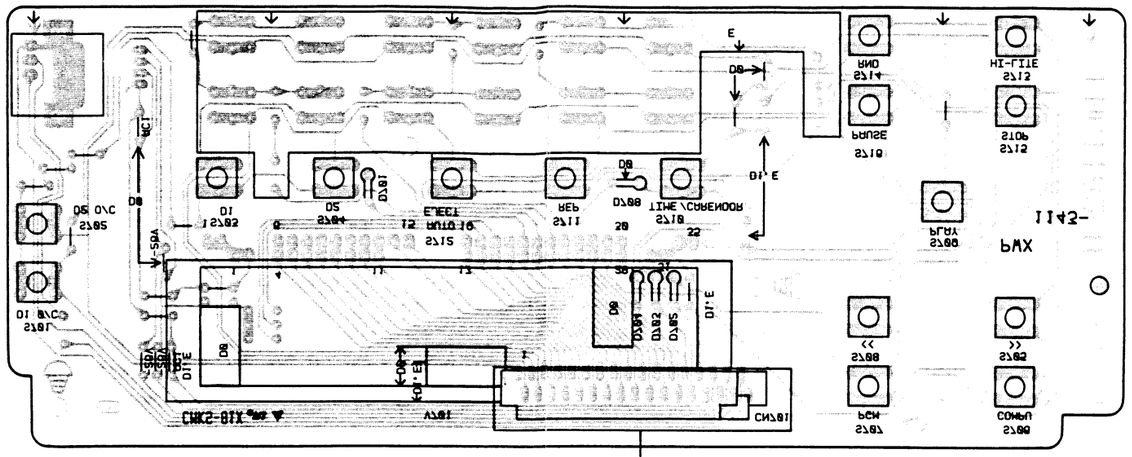
MOTHER P.C.B assembly (PWB)

To AA assembly (To page 8E)

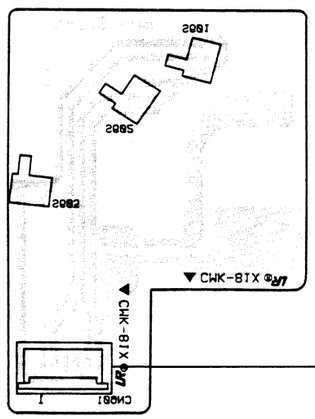
To AA assembly (To page 8E)

To Deck amplifier Block

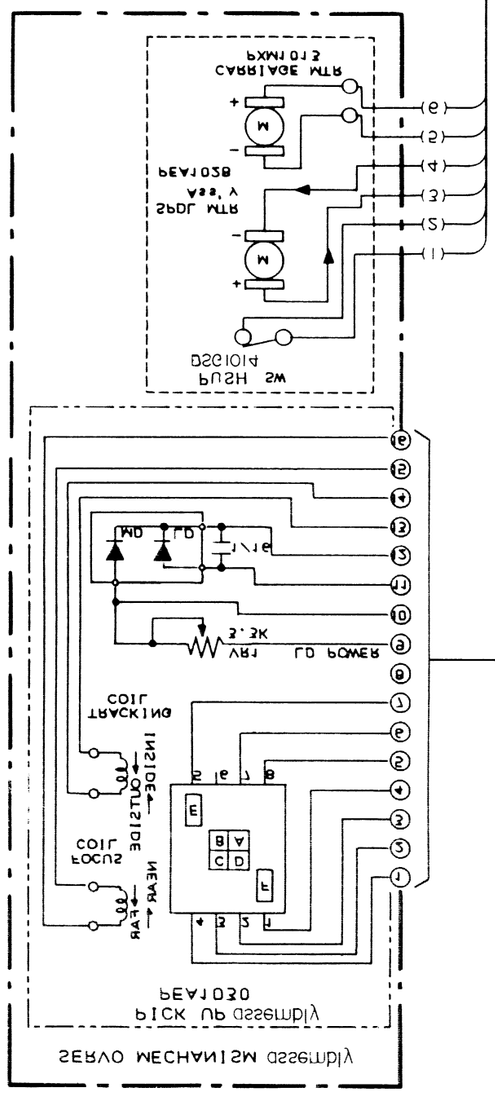
SUB P.C.B assemply (PWM-2411)



MECHA P.C.B assemply

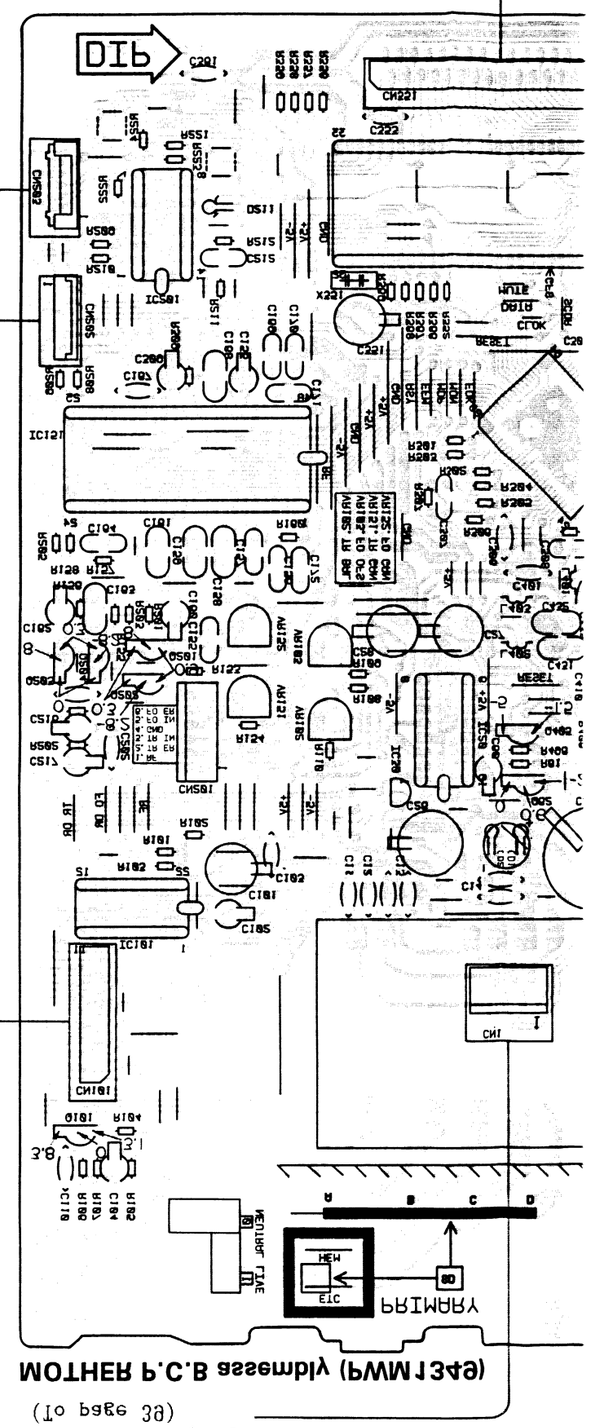


SERVO MECHANISM assemply



Note :
See pages 63,64 for the semiconductors without voltage indication.

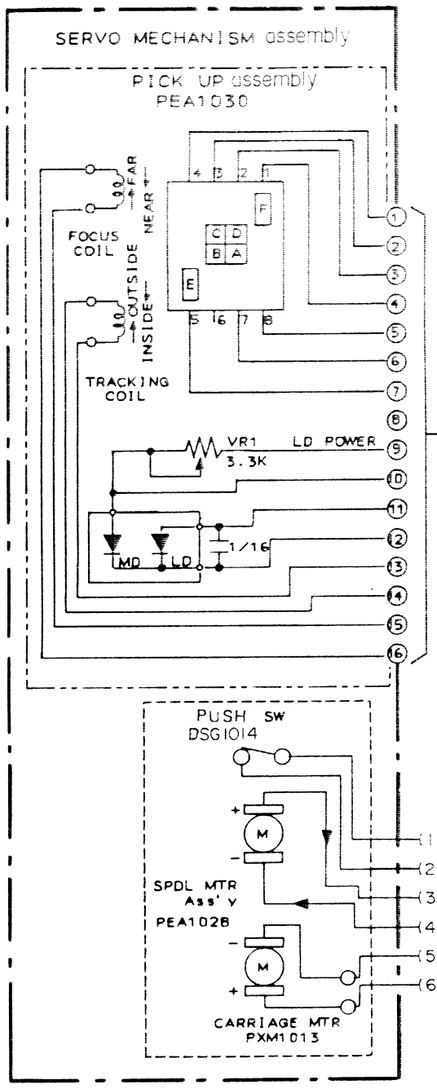
MOTHER P.C.B assemply (PWM-3411)

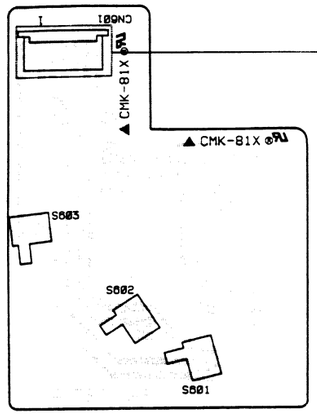


To TA assemply BLK
(To page 65)

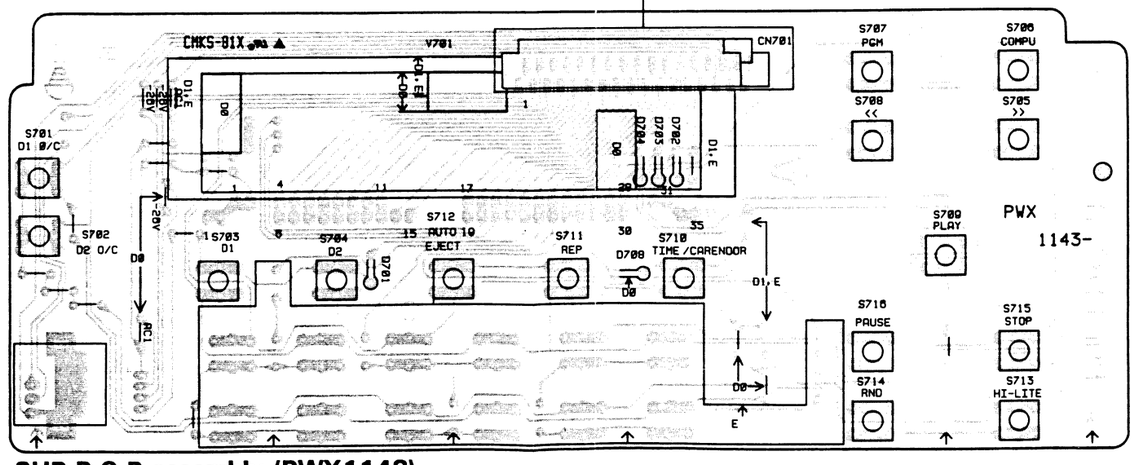
3.6 SCHEMATIC AND P.C.BOARDS CONNECTION DIAGRAM (CD BLOCK)

Note :
See pages 63,64 for the semiconductors without voltage indication.





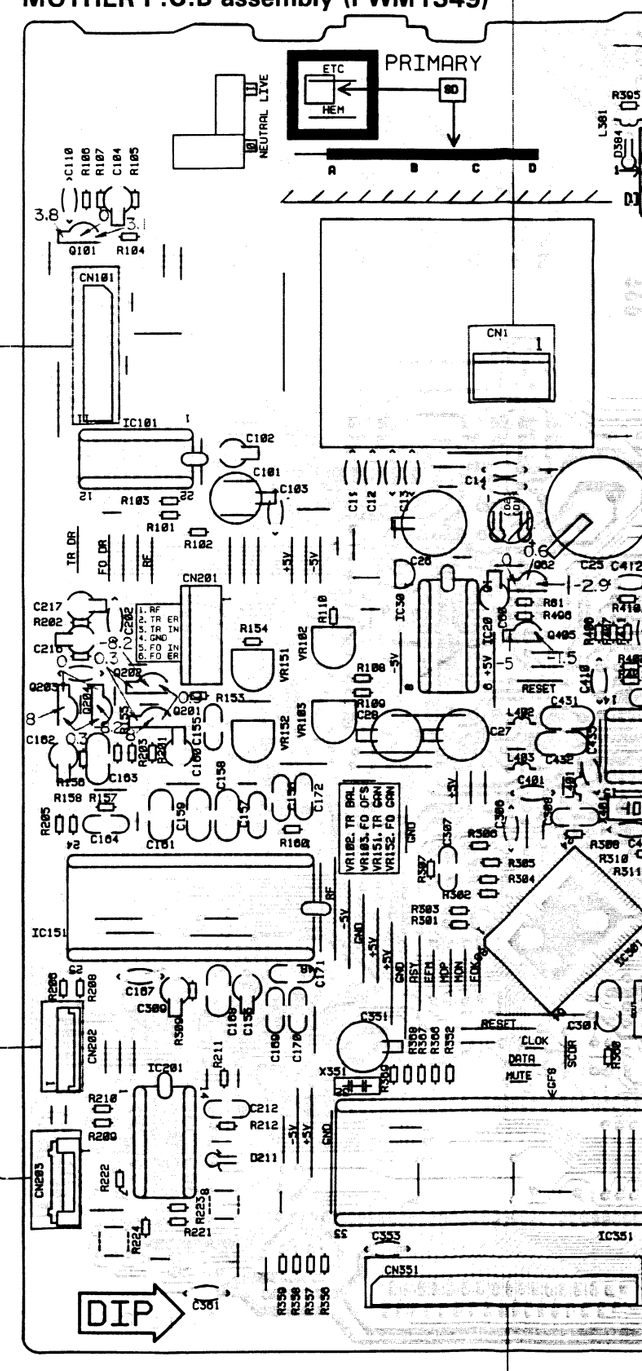
MECHA P.C.B assembly



SUB P.C.B assembly (PWX1143)

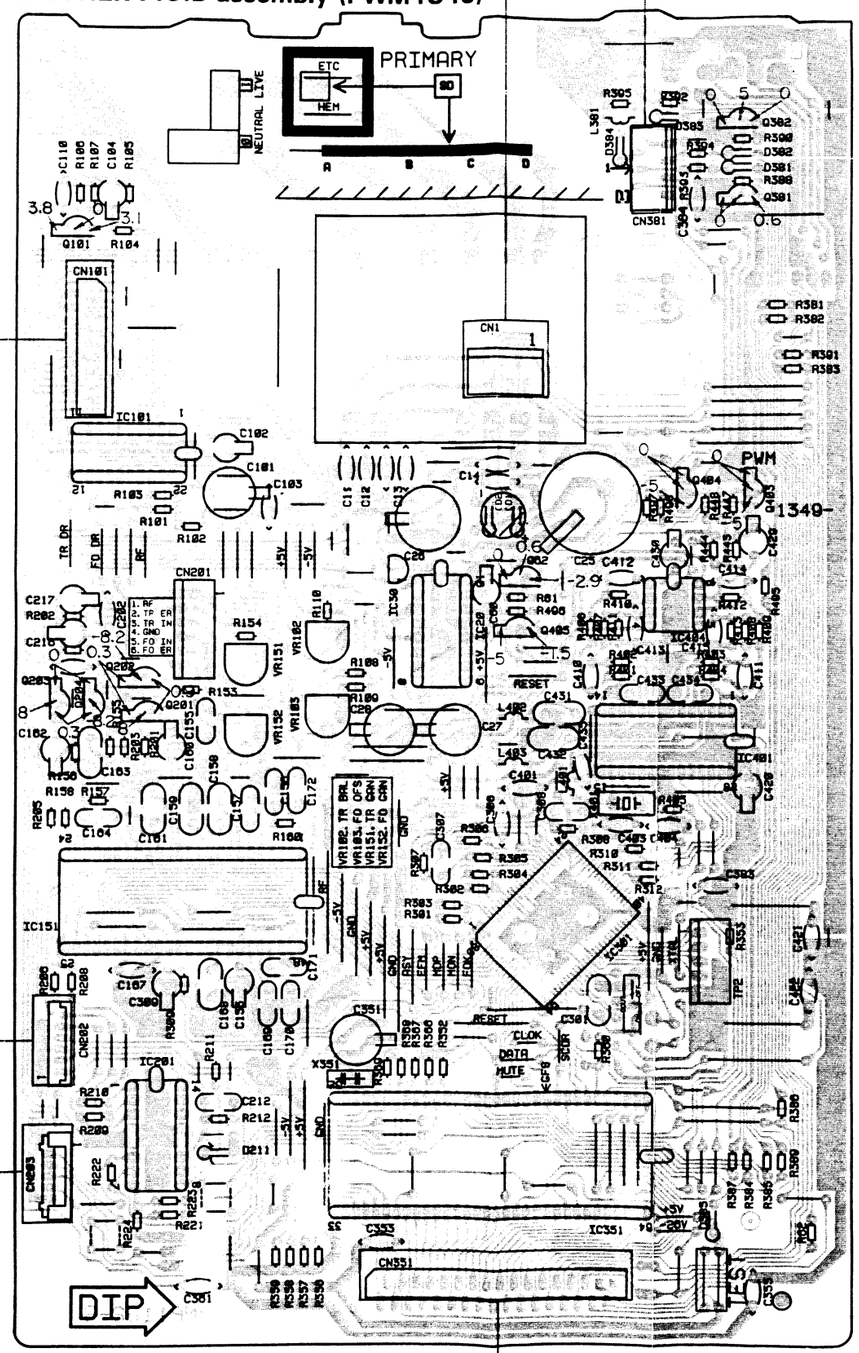
To AF assembly J18
(To page 39)

MOTHER P.C.B assembly (PWM1349)



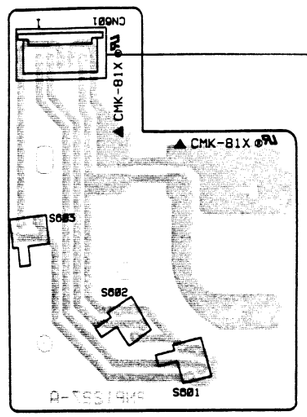
To AF assembly J18
(To page 39)

MOTHER P.C.B assembly (PWM1349)

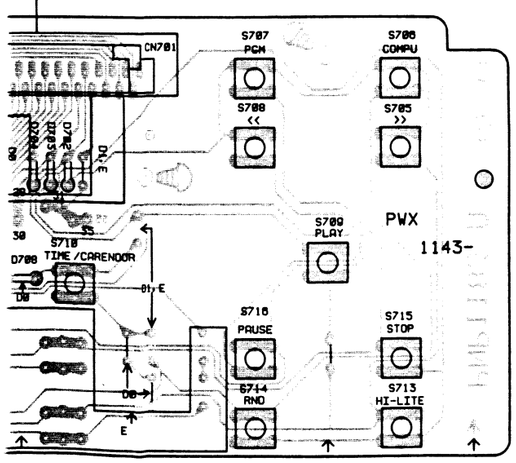


To Deck amplifier Block
AF assembly J19
(To page 39)

Q382
Q381
Q101
IC101
Q404
Q403
062
IC404
IC30
IC20 Q405
VR102
VR151
Q201
VR103 Q204
VR152
IC401
IC151
IC301
IC201
IC351



MECHA P.C.B assembly



P.C.B. pattern diagram	Corresponding part symbol	Part name
		Transistor
		FET
		Diode
		Zenner diode
		LED
		Varactor
		Tact switch
		Inductor
		Coil
		Transformer
		Filter
		Ceramic capacitor
		Mylar capacitor
		Styrol capacitor
		Electrolytic capacitor (Non polarized)
		Electrolytic capacitor (Noiseless)
		Electrolytic capacitor (Polarized)
		Electrolytic capacitor (Polarized)
		Power capacitor
		Semi-fixed resistor
		Resistor array
		Resistor
		Resonator
		Thermistor

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the above Table.
3. The capacitor terminal marked with ▭ shows negative terminal.
4. The diode marked with ○ shows cathode side.
5. The transistor terminal marked with ▭ shows emitter.

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
: DC voltage (V) at play state.
Value in ( ) is DC voltage at rated power.
⇦mA: DC current at no input signal

4. OTHERS:
➡: Signal route.
⊘ : Adjusting point.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5.SWITCH

MECHA PCB Assembly

S601 U
S602 S
S603 L

SUB PCB Assembly

S701 O/C D1
S702 O/C D2
S703 D1
S704 D2
S705 ▶▶ (▶▶|)
S706 COMPU
S707 PGM
S708 ◀◀ (|◀◀)
S709 ▶
S710 TIME/CALENDER
S711 REP
S712 AUTO EJECT
S713 HI LITE
S714 RND
S715 STOP
S716 PAUSE

List of semiconductor terminal voltage

Note: All terminal voltages are measured in the PLAY mode.

IC151
CXA1372S

Pin No.	Volts	Pin No.	Volts
1	0	25	−5
2	0	26	5
3	0	27	5
4	0	28	5
5	0	29	5
6	0	30	5
7	0	31	5
8	0	32	0
9	0	33	5
10	0	34	0
11	−1	35	0
12	0	36	N. C
13	0. 2	37	2. 5
14	0	38	2. 5
15	0	39	5
16	5	40	−1. 5
17	0	41	−1. 7
18	0	42	5
19	0	43	−0. 7
20	0.2~0.8	44	−1. 6
21	0	45	0
22	−4	46	0. 8
23	1. 3	47	−5
24	0	48	0

IC101
CXA1471S

Pin No.	Volts	Pin No.	Volts
1	N. C	16	0
2	2. 9	17	0
3	−4. 7	18	0. 8
4	0	19	0
5	0	20	5
6	−5	21	5
7	0	22	N. C
8	0		
9	N. C		
10	0		
11	N. C		
12	N. C		
13	−0. 9		
14	−0. 7		
15	0		

IC20
M5298P

Pin No.	Volts
1	-8.2
2	N.C
3	-5
4	0
5	-8.2
6	N.C
7	N.C
8	N.C
9	5
10	N.C
11	0.7
12	5
13	8
14	5
15	1.2
16	8

IC201
LA6520

Pin No.	Volts
1	0
2	0
3	-0.7
4	0
5	0
6	0
7	1.7
8	1.7
9	0.7
10	0
11	0
12	8
FIN	-8.2

IC351
PD4305A

Pin No.	Volts	Pin No.	Volts	Pin No.	Volts	Pin No.	Volts
1	-10	17	1.8	33	0	49	-22
2	-13.5	18	0	34	5	50	0
3	-5.5	19	5	35	0	51	5
4	-10.5	20	0.5	36	0	52	0
5	2.1	21	5	37	0	53	0
6	4.8	22	0	38	0	54	-26
7	4.5	23	0	39	5	55	-26
8	3.9	24	0	40	-22	56	-26
9	2.3	25	5	41	-22	57	-5
10	0	26	5	42	-22	58	-9
11	5	27	5	43	-22	59	-11
12	2.5	28	5	44	-22	60	5
13	5	29	5	45	-22	61	-2.5
14	5	30	2.5	46	-22	62	2
15	5	31	2.5	47	-22	63	-2.5
16	0	32	0	48	-22	64	5

IC404
NJM4558D-D

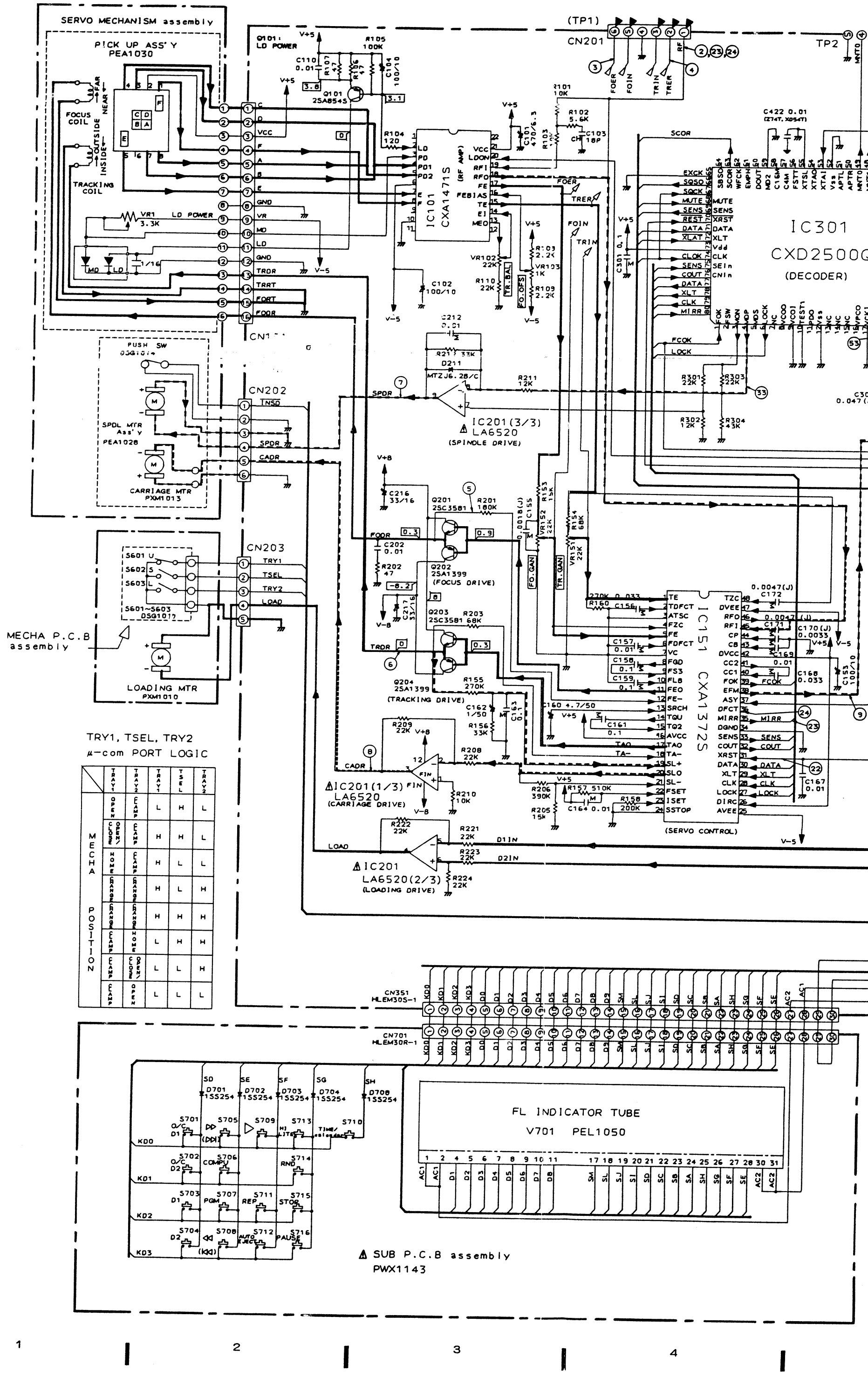
Pin No.	Volts
1	-0.2
2	1
3	1
4	-5
5	1
6	1
7	-0.2
8	5

IC401
TC9237N

Pin No.	Volts
1	5
2	0
3	5
4	5.5
5	2.5
6	2.5
7	0
8	0
9	2.5
10	2.5
11	5
12	0
13	N.C
14	0
15	0
16	1.9
17	1.9
18	5
19	2
20	0
21	0
22	0
23	0
24	5
25	2.5
26	2.5
27	2.5
28	5

IC301
CXD2500Q

Pin No.	Volts	Pin No.	Volts	Pin No.	Volts
1	5	31	N.C	61	N.C
2	N.C	32	2.5	62	N.C
3	5	33	5	63	0
4	2.6	34	2.5	64	N.C
5	N.C	35	2.5	65	0
6	5	36	N.C	66	3.3~4.6
7	N.C	37	N.C	67	5
8	N.C	38	N.C	68	0
9	0	39	N.C	69	2.1~3
10	0	40	N.C	70	5
11	N.C	41	N.C	71	5
12	0	42	5	72	5
13	N.C	43	N.C	73	5
14	N.C	44	N.C	74	5
15	N.C	45	N.C	75	5
16	N.C	46	4.4	76	0
17	0	47	0	77	5
18	2.5	48	0	78	5
19	2.4	49	0~0.3	79	5
20	2.4	50	N.C	80	0
21	0	51	N.C		
22	2.5	52	0		
23	5	53	2.5		
24	2.5	54	N.C		
25	N.C	55	0		
26	0	56	N.C		
27	2.5	57	N.C		
28	0	58	N.C		
29	N.C	59	0		
30	0	60	N.C		


SERVO MECHANISM assembly
PICK UP ASS'Y
PEA1030
FOCUS COIL
FAR
NEAR
OUTSIDE
INSIDE
TRACKING COIL
VR1 LD POWER 3.3K
MD
LD
1/16
Q101: LD POWER
2SA854S
C110 0.01
R107 47
R106 47
C104 100/10
R105 100K
R104 120
IC101 CXA1471S
(RF AMP)
VCC
LDON
RF1
RFO
FE
FEBIAS
TE
E1
MEO
LD
PD
PD1
PD2
GND
VR
MD
TRDR
TRRT
FORT
FOOR
C102 100/10
R101 10K
R102 5.6K
C103 18P
C101 470/6.3
R103 10K
(TP1)
CN201
FOER
FOIN
TRIN
TRER
RF
TP2
MNT0
C422 0.01
(Z74T, X054T)
SCOR
EXCK
SQSO
SQCK
MUTE
SENS
REST
DATA
XLAT
CLOK
SENS
COUT
DATA
XLT
CLK
MIRR
IC301
CXD2500Q
(DECODER)
C301 0.1
FCOK
LOCK
R301 22K
R303 22K
R302 12K
R304 43K
PUSH SW
DSG101?
CN202
TNSD
SPDR
CADR
SPDL MTR Ass'y
PEA1028
CARRIAGE MTR
PXM1013
IC201(3/3)
LA6520
(SPINDLE DRIVE)
C212 0.01
R213 33K
D211
MTZJ6.28/C
R211 12K
CN203
S601 U
S602 S
S603 L
S601~S603
DSG101?
TRY1
TSEL
TRY2
LOAD
MECHA P.C.B assembly
LOADING MTR
PXM1010
C216 33/16
Q201 2SC3581
R201 180K
C155
VR152 22K
R153 1.5K
R154 68K
VR151 22K
TR.GAN
FO.GAN
Q202 2SA1399
(FOCUS DRIVE)
C202 0.01
R202 47
C217 33/16
Q203 2SC3581 68K
Q204 2SA1399
(TRACKING DRIVE)
R155 270K
C162 1/50
C163 0.1
R209 22K
R156 33K
R208 22K
IC201(1/3) FIN
LA6520
(CARRIAGE DRIVE)
R210 10K
R222 22K
R221 22K
R223 22K
R224 22K
IC201
LA6520(2/3)
(LOADING DRIVE)
D1IN
D2IN
IC151 CXA1372S
(SERVO CONTROL)
TE
TDFCT
ATSC
FZC
FE
FDFCT
VC
FGD
FS3
FLB
FEO
FE-
SRCH
TQU
TQ2
AVCC
TAO
TA-
SL+
SLO
SL-
FSET
ISET
SSTOP
TZC
DVEE
RFO
RF1
CP
CB
DVCC
CC2
CC1
FOK
EFM
ASY
DFCT
MIRR
DGND
SENS
COUT
XRST
DATA
XLT
CLK
LOCK
DIRC
AVEE
C172 0.0047(J)
C171 0.0047(J)
C170(J) 0.0033
C169 0.01
C168 0.033
C167 0.01
C153 100/10
C156 0.01
C157 0.01
C158 0.1
C159 0.1
C160 4.7/50
C161 0.1
R160 270K
R157 510K
R158 200K
R206 390K
R205 15K
C164 0.01
TR.BAL
FO.OFS
R103 2.2K
VR103 1K
R109 2.2K
VR102 22K
R110 22K
C301 0.1
TRY1, TSEL, TRY2
μ-com PORT LOGIC
MECHA POSITION
OPEN
CLAMP
CHANGE
NONE
CLOSE/OPEN
CN351
HLEM30S-1
CN701
HLEM30R-1
KD0
KD1
KD2
KD3
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
SM
SL
SJ
SI
SD
SC
SB
SA
SH
SG
SF
SE
AC1
AC2
SD
SE
SF
SG
SH
D701 1SS254
D702 1SS254
D703 1SS254
D704 1SS254
D705 1SS254
S701
S702
S703
S704
S705
S706
S707
S708
S709
S710
S711
S712
S713
S714
S715
S716
O/C
D1
D2
(▷▷|)
(|◁◁)
COMPU
PGM
REP
STOP
RND
AUTO EJECT
PAUSE
MJ LITE
TIME/ calendar
FL INDICATOR TUBE
V701 PEL1050
SUB P.C.B assembly
PWX1143

⚠ MOTHER P.C.B assembly
PWM1349

IC401: DIGITAL FILTER & D/A CONVERTER
IC401 TC9237N

IC404 LOW PASS FILTER
IC404(1/2) NJM4558D-D
IC404(2/2) NJM4558D-D

Q403, Q404: MUTE
Q405 DTC124ES
Q405: MUTE DRIVE

IC351 PD4305B (SYSTEM CONTROL)
X351 VSS1014

Q381: BUFFER
Q382: BUFFER

CN381
To DECK AMPLIFIER BLOCK AF assembly J19 (To page41)
To DECK AMPLIFIER BLOCK AF assembly J18 (To page41)
CN1 KPE6

IC20: SYSTEM RESET & ±5V REGULATOR
IC20 M5298P
Q62: REGULATOR ON/OFF

NOTES

CAPACITORS μF
M Mylar CQMA
CH Seramic CCCCH
YB Seramic CKCYB
YX Seramic CGCYX
Un Marked Type CKCYF

RESISTORS Ω
1/6W type:
Rating Identified where used

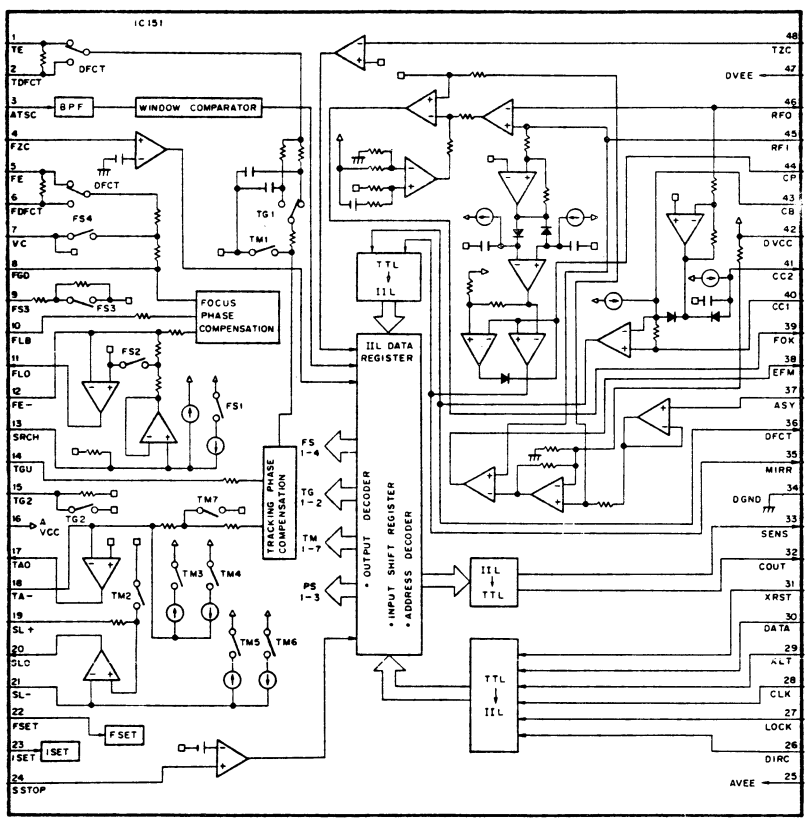
VR Ω
VRT86VS

OTHERS
⏚ :Chassis Ground

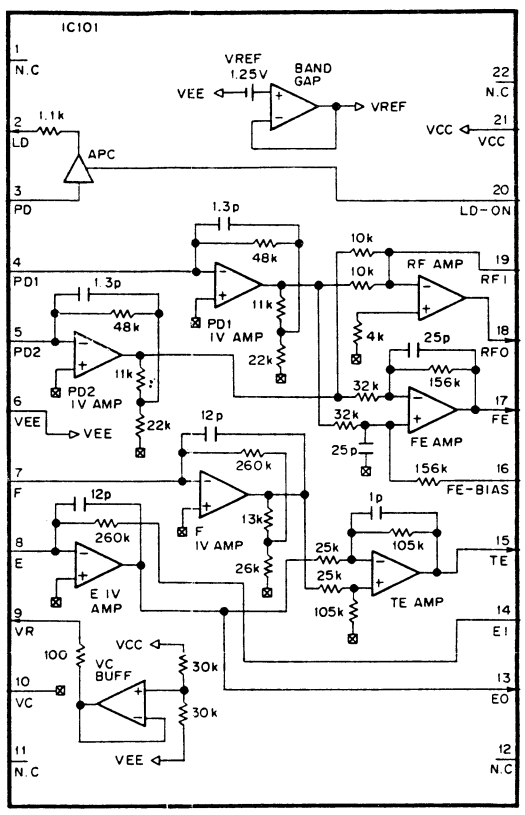
: Foucus servo loop
: Signal route
: Tracking servo loop
: Carriage servo loop
: Loading motor route
: Spindle motor route
▶ : Measurement point

› IC BLOCK

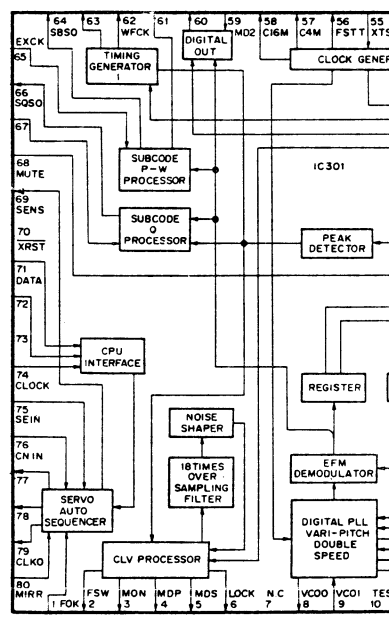
IC151 CXA1372S



IC101 CXA1471S



IC301 CXD2500Q

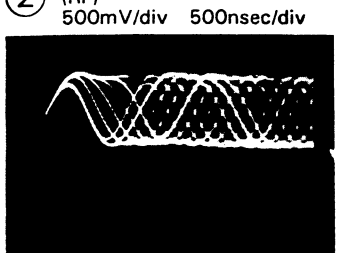


Wave Forms

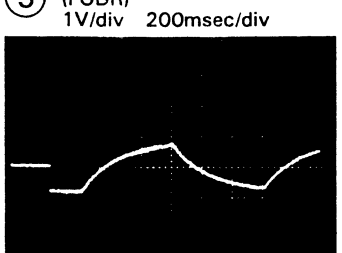
Note: The encircled numbers denote measuring points in the schematic diagram.

*1 50T-JUMP: After switching to the pause mode, press the manual search key.
*2 FOCUS-IN: Press the key without loading a disc.

② TP1-Pin 1: PLAY MODE
(RF)
500mV/div 500nsec/div

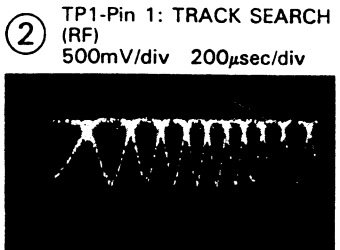


⑤ Q201 Emitter: FOCUS-IN (*2) MODE
(FODR)
1V/div 200msec/div

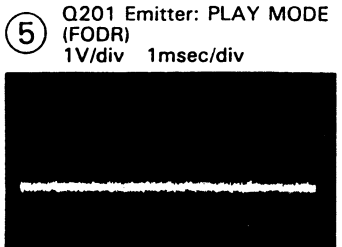


⑦ IC201-Pin 9: TRACK SEARCH MODE
(SPDR)
2V/div 50msec/div

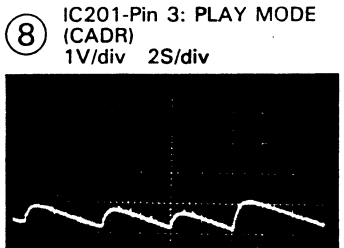
② TP1-Pin 1: TRACK SEARCH MODE
(RF)
500mV/div 200μsec/div



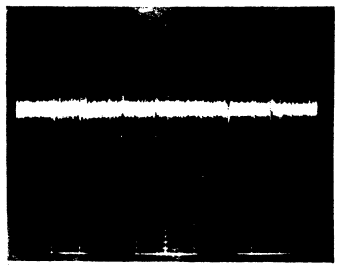
⑤ Q201 Emitter: PLAY MODE
(FODR)
1V/div 1msec/div



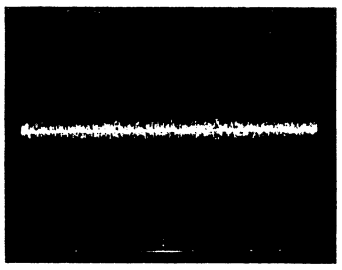
⑧ IC201-Pin 3: PLAY MODE
(CADR)
1V/div 2S/div



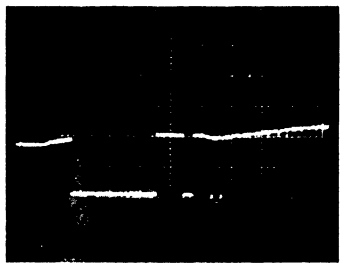
③ TP1-Pin 6: PLAY MODE
(FOER)
100mV/div 10msec/div



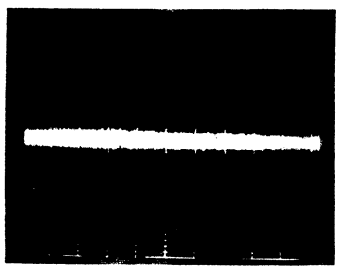
⑥ Q203 Emitter: PLAY MODE
(TRDR)
500mV/div 1msec/div



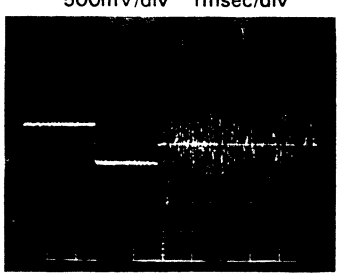
⑧ IC201-Pin 3: TRACK SEARCH MODE
(CADR)
2V/div 200msec/div



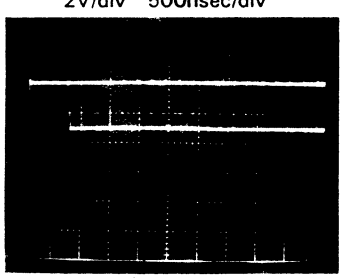
④ TP1-Pin 2: PLAY MODE
(TRER)
1V/div 10msec/div



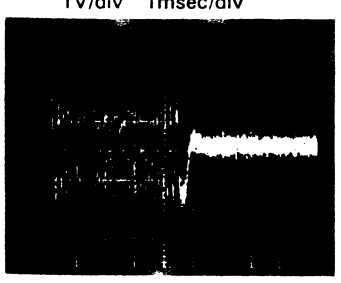
⑥ Q203 Emitter: 50T-JUMP (*1) MODE
(TRDR)
500mV/div 1msec/div



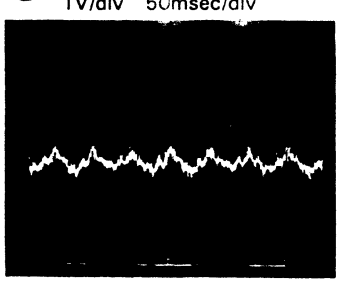
⑨ IC151-Pin 38: PLAY MODE
(EFM)
2V/div 500nsec/div



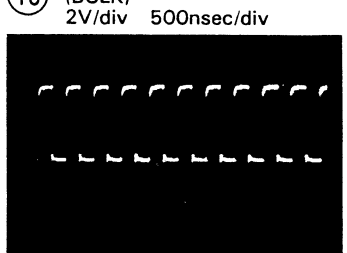
④ TP1-Pin 2: 50T-JUMP (*1) MODE
(TRER)
1V/div 1msec/div



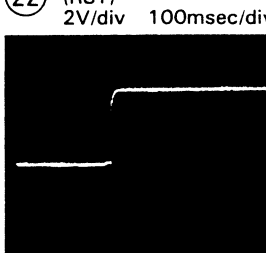
⑦ IC201-Pin 9: PLAY MODE
(SPDR)
1V/div 50msec/div



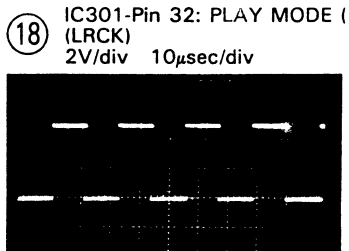
⑯ IC301-Pin 35: PLAY MODE (1kHz)
(BCLK)
2V/div 500nsec/div



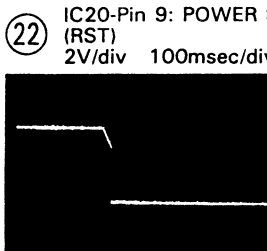
㉒ IC20-Pin 9: POWER
(RST)
2V/div 100msec/div



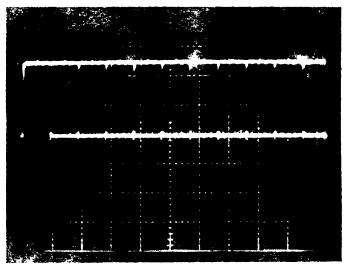
⑱ IC301-Pin 32: PLAY MODE (1kHz)
(LRCK)
2V/div 10μsec/div



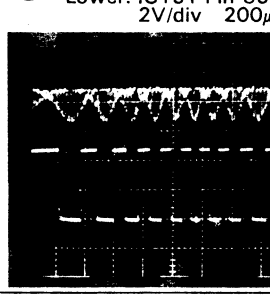
㉒ IC20-Pin 9: POWER
(RST)
2V/div 100msec/div



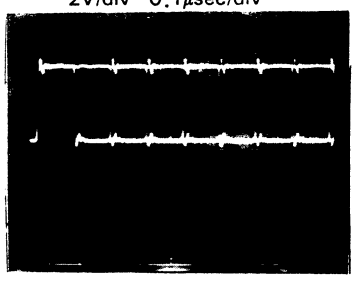
⑲ IC301-Pin 34: PLAY MODE (1kHz)
(DATA)
2V/div 500nsec/div



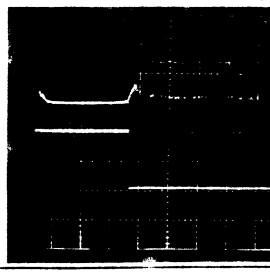
㉓ : TRACK S
Upper: TP1-Pin 1 (RF
Lower: IC151-Pin 35
2V/div 200μ



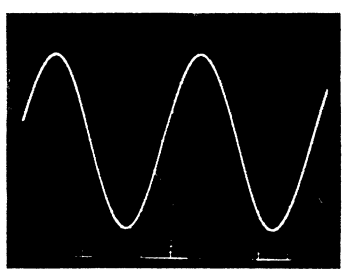
⑳ IC401-Pin 9, Pin 10
(D/A OUT) : PLAY MODE (1kHz)
2V/div 0.1μsec/div



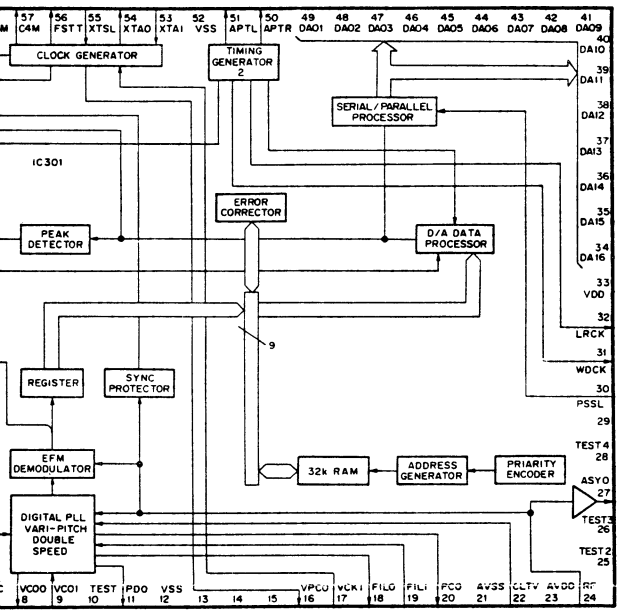
㉔ : PLAY MO
Upper: TP1-Pin 1 (RF
Lower: IC151-Pin 36
5V/div 200μ



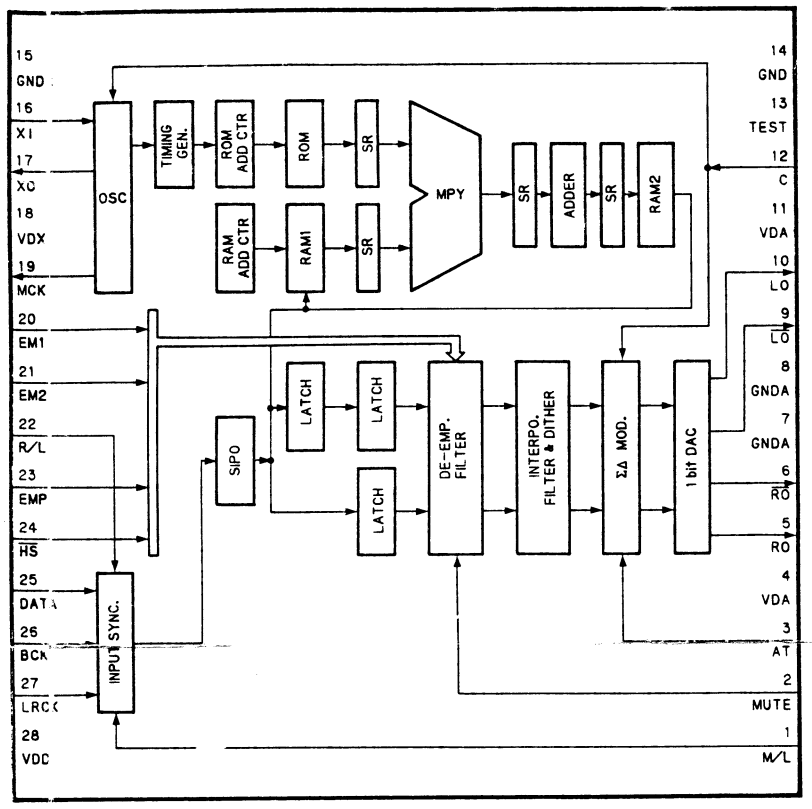
㉑ Pin -OUTPUT: PLAY MODE (1kHz)
1V/div 200μsec/div

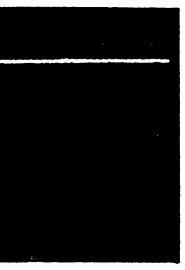
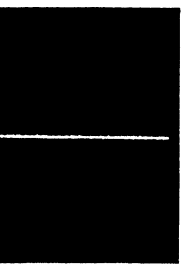
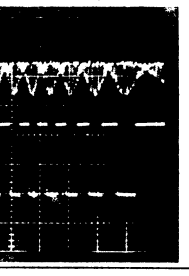
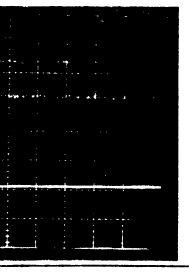
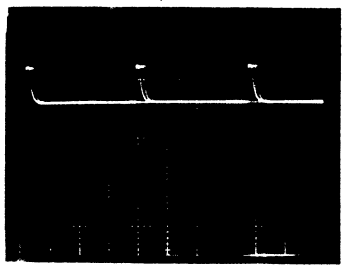
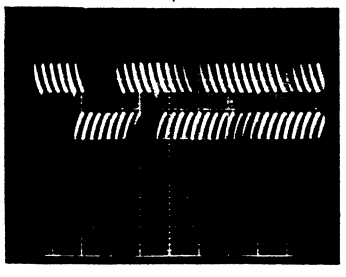


㉕



IC401 TC9237N



9: POWER SWITCH-ON 00msec/div  – GND	㉖
9: POWER SWITCH-OFF 00msec/div  – GND	㉗
: TRACK SEARCH MODE 21-Pin 1 (RF) 1V/div 151-Pin 35 (MIRR) V/div 200μsec/div  – GND – GND	㉘
: PLAY MODE 21-Pin 1 (RF) 1V/div 151-Pin 36 (DFCT) V/div 200μsec/div  – GND – GND	㉝ IC301-Pin 4: PLAY MODE (MDP) 2V/div 2μsec/div  – GND
	㊸ IC301-Pin 20: PLAY MODE (PCO) 2V/div 10μsec/div  – GND

4. P.C.B 's PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	*56 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Mark	No.	Description	Parts No.
⊙ **AF ASSEMBLY (AWZ3333)**			
SEMICONDUCTORS			
	IC1001	OP-AMP IC	RC4558DXP
	IC151	REGULATOR IC	NJM78M05FA
	IC152	REGULATOR IC	NJM79M05FA
	IC153, 154	REGULATOR IC	MC7812CT
	IC155	IC PROTECTOR	ICP-N75
	IC2001	OP-AMP IC	RC4558DXP
	IC2002	LOGIC IC	TC4066BP
	IC2201	OP-AMP IC	RC4558DXP
	IC2202	LOGIC IC	SN74LS05N
	IC2302	DOLBY-B IC	CXA1100P
	IC301	AUDIO IC	STK4142-2GP
	IC601	OP-AMP IC	RC4558DXP
	IC801	LOGIC IC	MC14052BCP
	IC802	LOGIC IC	TC4066BP
	IC833	OP-AMP IC	RC4558DXP
	Q2001-2004	TRANSISTOR	2SC2458
	Q2005, 2006	TRANSISTOR	2SC2878
	Q2007	TRANSISTOR	RN2203
	Q2008	TRANSISTOR	RN2201
	Q2009, 2201	TRANSISTOR	RN1201
	Q2202	TRANSISTOR	RN2203
	Q2203, 2204	TRANSISTOR	2SC2878
	Q2301-2304	TRANSISTOR	2SC2458
	Q2351	TRANSISTOR	RN2203
	Q401-403	TRANSISTOR	2SC2458
	Q404	TRANSISTOR	RN1203
	Q405	TRANSISTOR	2SC2458
	Q406	TRANSISTOR	2SA1048
	Q601	TRANSISTOR	RN2203
	Q602	N-FET	2SK246
	Q801	TRANSISTOR	RN2203
	Q802	TRANSISTOR	RN1203
	Q803	TRANSISTOR	RN2203

Mark	No.	Description	Parts No.
	D151	DIODE	D3SBA20 (A)
	D152-159	DIODE	1SR139-400
	D161	ZENER DIODE	RD8.2ESB2
	D162	DIODE	1SS252
	D163-166	DIODE	1SR139-400
	D168, 170	DIODE	1SR139-400
	D2301, 2302	DIODE	1SS252
	D401	ZENER DIODE	RD22EB
	D403	DIODE	1SR139-400
	D404	DIODE	1SS252
	D405	ZENER DIODE	RD6.8ESB2
	D406, 601	DIODE	1SS252
RELAY			
	RY401	RELAY	ASR1035
COILS			
	L151	AXIAL INDUCTOR	LAU2R2K
	L2201, 2202	INDUCTOR	LTA392J
	L501, 502	COIL	ATH-133
	F2351-2352	DOLBY FILTER	ATF1064
CAPACITORS			
	C1001-1004	CERAMIC CAPACITOR	CCMSL101J50
	C1005	CERAMIC CAPACITOR	CKSQYB152K50
	C1006	CERAMIC CAPACITOR	CKDYB152K50
	C1007, 1008	CERAMIC CAPACITOR	CKDYB562K50
	C1009-1012	ELECTR.CAPACITOR	CEAS2R2M50
	C1015, 1016	ELECTR.CAPACITOR	CEAS470M16
	C151, 152	ELECTROLYTIC CAPACIT	ACH1109
	C153	ELECTR.CAPACITOR	CEAS222M16
	C154	ELECTR.CAPACITOR	CEAS102M16
	C155, 156	ELECTR.CAPACITOR	CEAS220M16
	C157	ELECTR.CAPACITOR	CEAS222M25
	C158, 159	ELECTR.CAPACITOR	CEAS220M25

Mark	No.	Description	Parts No.
	C160	ELECTR.CAPACITOR	CEAS100M25
	C161	CERAMIC CAPACITOR	CKDYB103K500
	C162	CKA (0.01/AC250V)	ACG1005
	C2007, 2008	MYLOR FILM CAPACITOR	CQMA273J50
	C2009, 2010	MYLOR FILM CAPACITOR	CQMA183J50
	C2011, 2012	CERAMIC CAPACITOR	CKSQYB152K50
	C2201-2204	ELECTR.CAPACITOR	CEAS010M50
	C2205, 2206	CHIP CAPACITOR	CKSQYB222K50
	C2207, 2208	AUDIO FILM CAPACITOR	CFTXA104J50
	C2209, 2210	ELECTR.CAPACITOR	CEAS330M16
	C2211, 2212	CERAMIC CAPACITOR	CKCYX183M25
	C2213, 2214	MYLOR FILM CAPACITOR	CQMA752J50
	C2215, 2216	CERAMIC CAPACITOR	CKSQYB562K50
	C2217, 2218	MYLOR FILM CAPACITOR	CQMA273J50
	C2221, 2222	ELECTR.CAPACITOR	CEAS2R2M50
	C2225, 2226	ELECTR.CAPACITOR	CEAS470M16
	C2303, 2304	ELECTR.CAPACITOR	CEAS010M50
	C2305	ELECTR.CAPACITOR	CEAS220M16
	C2306	ELECTR.CAPACITOR	CEAS220M25
	C2351, 2352	ELECTR.CAPACITOR	CEAS100M50
	C2353, 2354	ELECTR.CAPACITOR	CEASR22M50
	C2355	ELECTR.CAPACITOR	CEAS101M10
	C2356-2359	ELECTR.CAPACITOR	CEAS100M50
	C301, 302	ELECTR.CAPACITOR	CEAS2R2M50
	C303, 304	CERAMIC CAPACITOR	CKMYB331K50
	C305, 306	ELECTR.CAPACITOR	CEAS220M50
	C307, 308	ELECTR.CAPACITOR	CEAS101M25
	C309	ELECTR.CAPACITOR	CEANP220M50
	C310	ELECTR.CAPACITOR	CEANP100M50
	C311, 312	ELECTR.CAPACITOR	CEAS100M50
	C313	ELECTROLYTIC CAPACIT	ACH1143
	C401-404	CERAMIC CAPACITOR	CKCYF473Z50
	C405	ELECTR.CAPACITOR	CEAS221M16
	C406	ELECTR.CAPACITOR	CEAS220M25
	C407	ELECTR.CAPACITOR	CEAS221M16
	C408	ELECTR.CAPACITOR	CEAS100M50
	C501	ELECTR.CAPACITOR	ACH1144
	C601, 602	CERAMIC CAPACITOR	CKMYB471K50
	C603, 604	ELECTR.CAPACITOR	CEAS2R2M50
	C605	CERAMIC CAPACITOR	CKSQYB681K50
	C606	CERAMIC CAPACITOR	CKCYF473Z50
	C831, 832	CERAMIC CAPACITOR	CCMSL101J50
	C856-858	CERAMIC CAPACITOR	CKMYB471K50
RESISTORS			
	VR2201, 2202	VR	VRTB6VS222
	R1013	CHIP RESISTOR	RS1/10S104J
	R159-162	CARBON FILM RESISTOR	RD1/4PM100J
	R163, 164	METAL OXIDE RESISTOR	RS2LMFR22J

Mark	No.	Description	Parts No.
	R2003, 2004	CHIP RESISTOR	RS1/10S122J
	R2005, 2006	CHIP RESISTOR	RS1/10S105J
	R2007, 2008	CHIP RESISTOR	RS1/10S332J
	R2009, 2010	CHIP RESISTOR	RS1/10S105J
	R2011	CHIP RESISTOR	RS1/10S472J
	R2014	CHIP RESISTOR	RS1/10S472J
	R2016	CHIP RESISTOR	RS1/10S472J
	R2019, 2020	CHIP RESISTOR	RS1/10S154J
	R2021, 2022	CHIP RESISTOR	RS1/10S222J
	R2207, 2208	CHIP RESISTOR	RS1/10S104J
	R2209, 2210	CHIP RESISTOR	RS1/10S683J
	R2211, 2212	CHIP RESISTOR	RS1/10S223J
	R2213, 2214	CHIP RESISTOR	RS1/10S333J
	R2223, 2224	CHIP RESISTOR	RS1/10S471J
	R2226	CHIP RESISTOR	RS1/10S681J
	R2233, 2234	CHIP RESISTOR	RS1/10S102J
	R2301, 2302	CHIP RESISTOR	RS1/10S273J
	R2303, 2304	CHIP RESISTOR	RS1/10S362J
	R2305, 2306	CHIP RESISTOR	RS1/10S103J
	R2317, 2318	CHIP RESISTOR	RS1/10S222J
	R2351, 2352	CHIP RESISTOR	RS1/10S242J
	R2355, 2356	CHIP RESISTOR	RS1/10S682J
	R2357	CHIP RESISTOR	RS1/10S433J
	R2361, 2362	CHIP RESISTOR	RS1/10S222J
	R2363, 2364	CHIP RESISTOR	RS1/10S273J
	R2366	CHIP RESISTOR	RS1/10S103J
	R305, 306	CARBON FILM RESISTOR	RD1/4PM104J
	R309-312	CARBON FILM RESISTOR	RD1/4PM222J
	R313	CARBON FILM RESISTOR	RD1/4PMFL471J
	R314	CARBON FILM RESISTOR	RD1/4PMFL101J
	R315	CARBON FILM RESISTOR	RD1/4PM102J
	R316, 317	CARBON FILM RESISTOR	RD1/4PMFL222J
	R318	CARBON FILM RESISTOR	RD1/4PMFL101J
	R401, 402	CARBON FILM RESISTOR	RD1/4PM100J
	R409	CARBON FILM RESISTOR	RD1/2PM182J
	R416	METAL OXIDE RESISTOR	RS2LMF271J
	R417	METAL OXIDE RESISTOR	RS2LMF331J
	R501, 502	CARBON FILM RESISTOR	RD1/4PMFL100J
	R805, 806	CHIP RESISTOR	RS1/10S273J
	R843, 844	CHIP RESISTOR	RS1/10S223J
	R855, 856	CHIP RESISTOR	RS1/10S332J
	R857	CHIP RESISTOR	RS1/10S104J
	R858	CHIP RESISTOR	RS1/10S000J
		Other resistors	RD1/8PM□□□J

Mark	No.	Description	Parts No.
OTHERS			
		PIN JACK (4P)	AKB1124
		2P PIN JACK	AKB1146
		SPEAKER TERMINAL 4-P	AKE-109
		JACK	AKN-203
		SOCKET (14P)	AKP1048
	CN10	CONNECTOR (14P)	KPE14
	CN11	CONNECTOR (13P)	KPE13
	CN12	CONNECTOR (10P)	KPE10
	CN14	CONNECTOR (8P)	KPE8
	CN16	CONNECTOR (7P)	KPE7
	CN4	CONNECTOR (13P)	KPE13
	CN5	CONNECTOR (5P)	KPE5

VR ASSEMBLY

SEMICONDUCTORS

IC551	OP-AMP IC	RC4558DXP
IC552	MECHANISM DRIVER IC	TA7291S
Q551, 552	TRANSISTOR	2SC2878
Q553	TRANSISTOR	RN2203

CAPACITORS

C551, 552	ELECTR.CAPACITOR	CEAS4R7M50
C553, 554	CHIP CAPACITOR	CCSQCH101J50
C555, 556	ELECTR.CAPACITOR	CEAS101M16
C557	ELECTR.CAPACITOR	CEAS220M25
C558	CERAMIC CAPACITOR	CKSQYF104Z50
C559	CERAMIC CAPACITOR	CKCYF473Z50

RESISTORS

VR551	VARIABLE RESISTOR	ACX1051
R554	CHIP RESISTOR	RS1/10S000J
R555, 556	CHIP RESISTOR	RS1/10S104J
R561	CHIP RESISTOR	RS1/10S000J
R565, 566	CHIP RESISTOR	RS1/10S102J
	Other resistors	RD1/8PM□□□J

HEAD PHONE ASSEMBLY

CAPACITORS

C453	CERAMIC CAPACITOR	CKDYF473Z50

RESISTORS

R451, 452	METAL OXIDE RESISTOR	RS1LMF331J
R453	CARBONFILM RESISTOR	RD1/8PM100J

Mark	No.	Description	Parts No.
OTHERS			
		JACK (HEAD PHONE)	AKN1010
	CN1	CONNECTOR (5P)	KPC5

TRANS CONNECT ASSEMBLY

No parts are supplied with the TRANS CONNECT ASSEMBLY.

⊙ DISPLAY ASSEMBLY (AWZ3350)

SEMICONDUCTORS

IC1501	LOGIC IC	SN74LS05N
IC1502	LOGIC IC	SN74LS03N
IC1651	SYSTEM CONT.μ-COM	PD5147B
IC1652	RESET IC	M51951BSL
IC1701-1703	OP-AMP IC	RC4558DXP
IC1704	GEQ FL DRIVER IC	LC7566
IC701, 702	AUDIO IC	BA3812L
Q1501	TRANSISTOR	RN1201
Q1503, 1504	TRANSISTOR	RN1201
Q1505-1507	TRANSISTOR	RN1203
Q1508, 1509	TRANSISTOR	RN2201
Q1601	TRANSISTOR	RN2204
Q1602	TRANSISTOR	RN1203
Q1603	TRANSISTOR	RN2204
Q1604	TRANSISTOR	2SA1515
Q1605	TRANSISTOR	RN1203
Q1606	TRANSISTOR	2SA1515
Q1607	TRANSISTOR	RN1203
Q1608	TRANSISTOR	2SA1515
Q1609	TRANSISTOR	RN1203
Q1610	TRANSISTOR	2SA1515
Q1611	TRANSISTOR	RN1203
Q1701	TRANSISTOR	RN1201
D1501-1504	LED (GREEN)	AEL1130
D1505	LED (RED)	AEL1119
D1506, 1507	LED (RED)	AEL1126
D1509	LED	AEL1128
D1510	LED (GREEN)	AEL1129
D1511-1516	LED (RED)	AEL1108
D1517	DIODE	1SS252
D1518, 1519	LED (RED)	AEL1065
D1520	DIODE	1SS252
D1537-1539	DIODE	1SS252
D1601-1615	DIODE	1SS252
D1651-1657	DIODE	1SS252
D1659, 1660	DIODE	1SS252
D1701-1713	DIODE	1SS252

Mark	No.	Description	Parts No.
SWITCHES			
	S1504, 1505	SWITCH	ASG1034
	S1507	SWITCH	ASG1034
	S1510-1514	SWITCH	ASG1034
	S1516-1519	SWITCH	ASG1034
	S1522-1525	SWITCH	ASG1034
	S1528	SWITCH	ASD1012
COIL			
	L1651	AXIAL INDUCTOR	LAU220K
CAPACITORS			
	C1601	ELECTR.CAPACITOR	CEAS470M16
	C1602	ELECTR.CAPACITOR	CEASR33M50
	C1651	CERAMIC CAPACITOR	CKDYX473M16
	C1652	ELECTR.CAPACITOR	CEAS101M16
	C1653	CERAMIC CAPACITOR	CKCYF473Z50
	C1655-1658	CERAMIC CAPACITOR	ACG1020
	C1659	ELECTR.CAPACITOR	CEAS010M50
	C1660	CERAMIC CAPACITOR	CCDSL100D50
	C1701	ELECTR.CAPACITOR	CEASR22M50
	C1702, 1703	CERAMIC CAPACITOR	CKDYX333M25
	C1704	ELECTROLYTIC CAPACIT	CEASR15M50
	C1705, 1706	CERAMIC CAPACITOR	CKDYX103M16
	C1707	ELECTROLYTIC CAPACIT	CEJAR22M50
	C1708, 1709	CERAMIC CAPACITOR	CKCYB332K50
	C1710	ELECTR.CAPACITOR	CEASR22M50
	C1711, 1712	CERAMIC CAPACITOR	CKMYB102K50
	C1713	ELECTR.CAPACITOR	CEASR22M50
	C1714, 1715	CERAMIC CAPACITOR	CKMYB331K50
	C1716	ELECTR.CAPACITOR	CEASR22M50
	C1717	CERAMIC CAPACITOR	CKMYB152K50
	C1718, 1719	ELECTR.CAPACITOR	CEAS010M50
	C701, 702	ELECTR.CAPACITOR	CEAS4R7M50
	C703, 704	CERAMIC CAPACITOR	CKMYB331K50
	C705, 706	CERAMIC CAPACITOR	CCDSL101J50
	C707, 708	CERAMIC CAPACITOR	CKDYX393M16
	C709, 710	ELECTR.CAPACITOR	CEASR68M50
	C711, 712	CERAMIC CAPACITOR	CKDYX183M16
	C713, 714	ELECTROLYTIC CAPACIT	CEJAR15M50
	C715, 716	CERAMIC CAPACITOR	CGMYX392M25
	C717, 718	CERAMIC CAPACITOR	CKDYX683M16
	C719, 720	CERAMIC CAPACITOR	CGMYB182M50
	C721, 722	CERAMIC CAPACITOR	CKDYX153M16
	C723, 724	CERAMIC CAPACITOR	CKMYB391K50
	C725, 726	CERAMIC CAPACITOR	CGMYX682M25
	C727, 728	ELECTR.CAPACITOR	CEAS470M16
	C729, 730	ELECTROLYTIC CAPACIT	CEJA470M16
	C731, 732	ELECTROLYTIC CAPACIT	CEJA4R7M50

Mark	No.	Description	Parts No.
RESISTORS			
	VR1601, 1602	VR	VRTM6V203
	VR1603	VR	VRTM6V103
	VR701-710	VR	ACU1034
	R1515	CARBON FILM RESISTOR	RD1/2PM6R8J
	R1662	RESISTOR ARRAY (3.3k)	RA8T332J
	R1736	RESISTOR ARRAY (100k)	RA8T104J
	R1737	RESISTOR ARRAY (100k)	RA13T104J
		Other resistors	RD1/8PM□□□J
OTHERS			
		REMOTE RECEIVER UNIT	AXX1010
	V1701	FL TUBE	AAV1117
	X1651	CERAMIC RESONATOR	ASS1025
	CN8	CONNECTOR (15P)	KPE15

1 MECHA SW ASSEMBLY

SWITCHES

	S1551-1555	SWITCH	ASG1034

2 MECHA SW ASSEMBLY

SWITCHES

	S1556-1560	SWITCH	ASG1034

⊙ SUB TRANS ASSEMBLY (AWR1056)

SEMICONDUCTORS

	IC101	REGULATOR IC	NJM78M56FA
	IC102	REGULATOR IC	UPC78M12AHF
	Q101	TRANSISTOR	2SC2458
	D101	ZENER DIODE	RD10ESB2
	D102	ZENER DIODE	RD30ESB2
	D103-106	DIODE	1SR139-400
	D107, 109	DIODE	1SS252
RELAY			
	RY101	RELAY	ASR1027
TRANSFORMER			
	T101	POWER TRANSFORMER	ATT1149

Mark	No.	Description	Parts No.
CAPACITORS			
	C101	ELECTR.CAPACITOR	CEAS222M25
	C102	ELECTR.CAPACITOR	CEAS221M50
	C103, 104	ELECTR.CAPACITOR	CEAS470M16
	C105	ELECTR.CAPACITOR	CEAS470M50
	C107	ELECTR.CAPACITOR	CEAS470M16
RESISTORS			
	R101	METAL OXIDE RESISTOR	RS3LMF181J
	R102	CARBONFILM RESISTOR	RD1/8PM562J
	R109	CARBONFILM RESISTOR	RD1/8PM222J

1 MECHA ASSEMBLY

CAPACITORS			
	C2001, 2002	CERAMIC CAPACITOR	CKMYB391K50
	C2005, 2006	AUDIO FILM CAPACITOR	CFTXA223J50
	C2007, 2008	ELECTR.CAPACITOR	CEAS4R7M50
	C2009, 2010	ELECTR.CAPACITOR	CEAS470M10
RESISTORS			
	VR2001, 2002	VR	VRTM6H202
		Other resistors	RD1/8PM□□□J

2 MECHA ASSEMBLY

SEMICONDUCTORS			
	IC2001, 2021	OP-AMP IC	RC4558DXP
	Q2021, 2022	N-FET	2SK373
	Q2251	TRANSISTOR	RN1201
	Q2252	TRANSISTOR	2SA1515
	Q2253, 2254	TRANSISTOR	2SC3377
	Q2255	TRANSISTOR	2SC2458
	D2021-2026	DIODE	1SS252
COILS & TRANSFORMER			
	L2204, 2205	INDUCTOR	LTA822J
	T2251	OSC TRANSFORMER	ATX-043
CAPACITORS			
	C2021, 2022	CERAMIC CAPACITOR	CCMSL100D50
	C2023, 2024	CERAMIC CAPACITOR	CKMYB391K50
	C2027, 2028	AUDIO FILM CAPACITOR	CFTXA223J50
	C2029, 2030	ELECTR.CAPACITOR	CEAS4R7M50
	C2031, 2032	ELECTR.CAPACITOR	CEAS470M10
	C2219, 2220	CERAMIC CAPACITOR	CCDSL271K500
	C2223, 2224	CERAMIC CAPACITOR	CKDYB681K50
	C2251	ELECTR.CAPACITOR	CEAS470M16
	C2252, 2253	CERAMIC CAPACITOR	CGMYX103M16
	C2254	CERAMIC CAPACITOR	CKMYB221K50
	C2255	MYLOR FILM CAPACITOR	CQMA153K50
	C2256	CERAMIC CAPACITOR	CKMYB681K50
	C2257	MYLOR FILM CAPACITOR	CQMA123K250
	C2258	ELECTR.CAPACITOR	CEAS4R7M50
	C2259, 2260	CERAMIC CAPACITOR	CCCSL101K500
	C2261	MYLOR FILM CAPACITOR	CQMA562K400
	C2262	CQPA (2000p/630V)	ACE1020
	C2263	ELECTR.CAPACITOR	CEAS100M50
RESISTORS			
	VR2021, 2022	VR	VRTM6V202
	VR2251, 2252	VR	VRTM6H204
	R2253	CARBON FILM RESISTOR	RD1/2PM360J
		Other resistors	RD1/8PM□□□J

⊙ MOTHER P.C.B ASSEMBLY (PWM1349)

SEMICONDUCTORS			
	IC101	PRE AMP IC	CXA1471S
	IC151	SERVO IC	CXA1372S
⚠	IC20	REGULATOR IC	M5298P
⚠	IC201	POWER OP-AMP, IC	LA6520
⚠	IC30	IC PROTECTOR	ICP-N10
	IC301	EFM DEMODULATION IC	CXD2500Q
	IC351	MICROCOMPUTER	PD4305B
	IC401	8FS DF DA CONVERTER IC	TC9237N
	IC404	OP-AMP IC	NJM4558D-D
	Q101	TRANSISTOR	2SA854S
	Q201	TRANSISTOR	2SC3581
	Q202	TRANSISTOR	2SA1399
	Q203	TRANSISTOR	2SC3581
	Q204	TRANSISTOR	2SA1399
	Q381, 382	TRANSISTOR	2SC1740S
	Q403, 404	TRANSISTOR	2SD2144S
	Q405	TRANSISTOR	DTC124ES
	Q62	TRANSISTOR	2SC1740S
⚠	D1, 2	DIODE	11ES2
	D211	ZENNER DIODE	MTZJ6.2B/C
	D381-385	DIODE	1SS254
COILS			
	L381	AXIAL INDUCTOR	LAU010K
	L401	AXIAL COIL	LAUR22K
	L402, 403	AXIAL INDUCTOR	LAU010K

Mark No.	Description	Parts No.
CAPACITORS		
C101	ELECTROLYTIC CAPACIT	CEAS471M6R3
C102	ELECTR.CAPACITOR	CEAS101M10
C103	CERAMIC CAPACITOR	CCCCH180J50
C104	ELECTR.CAPACITOR	CEAS101M10
C11, 110	CERAMIC CAPACITOR	CKCYF103Z50
C12-14	CERAMIC CAPACITOR	CKCYF103Z50
C153	ELECTR.CAPACITOR	CEAS101M10
C155	MYLOR FILM CAPACITOR	CQMA182J50
C156	MYLOR FILM CAPACITOR	CQMA333K50
C157	MYLOR FILM CAPACITOR	CQMA103K50
C158, 159	MYLOR FILM CAPACITOR	CQMA104K50
C160	ELECTR.CAPACITOR	CEAS4R7M50
C161	MYLOR FILM CAPACITOR	CQMA104K50
C162	ELECTR.CAPACITOR	CEAS010M50
C163	MYLOR FILM CAPACITOR	CQMA104K50
C164	MYLOR FILM CAPACITOR	CQMA103K50
C167	CERAMIC CAPACITOR	CKCYF103Z50
C168	MYLOR FILM CAPACITOR	CQMA333K50
C169	MYLOR FILM CAPACITOR	CQMA103K50
C170	MYLOR FILM CAPACITOR	CQMA332J50
C171	MYLOR FILM CAPACITOR	CQMA472J50
C172	MYLOR FILM CAPACITOR	CQMA472K50
C202	CERAMIC CAPACITOR	CKCYF103Z50
C212	MYLOR FILM CAPACITOR	CQMA103K50
C216, 217	ELECTR.CAPACITOR	CEAS330M16
C27	ELECTROLYTIC CAPACIT	CEAS471M6R3
C28	ELECTR.CAPACITOR	CEAS101M10
C301	MYLOR FILM CAPACITOR	CQMA104K50
C306	CERAMIC CAPACITOR	CKCYB152K50
C307	MYLOR FILM CAPACITOR	CQMA473J50
C308	MYLOR FILM CAPACITOR	CQMA103K50
C309	ELECTR.CAPACITOR	CEASR47M50
C351	ELECTROLYTIC CAPACIT	CEAS471M6R3
C353, 355	CERAMIC CAPACITOR	CKCYF103Z50
C361	CERAMIC CAPACITOR	CKCYF103Z50
C383, 384	CERAMIC CAPACITOR	CKCYF103Z50
C401	CERAMIC CAPACITOR	CKCYF103Z50
C403, 404	CERAMIC CAPACITOR	CCCCH470J50
C410, 411	CERAMIC CAPACITOR	CCCSL560J50
C412-415	CERAMIC CAPACITOR	CCCCH390J50
C420	ELECTR.CAPACITOR	CEAS330M16
C421	CERAMIC CAPACITOR	CKCYF473Z50
C422	CERAMIC CAPACITOR	CKCYF103Z50
C429, 430	ELECTR.CAPACITOR	CEAS220M25
C431, 432	MYLOR FILM CAPACITOR	CQMA104K50
C433, 434	MYLOR FILM CAPACITOR	CQMA103K50
C435	CERAMIC CAPACITOR	CKCYF103Z50
C60	ELECTR.CAPACITOR	CEAS010M50
RESISTORS		
VR102	VR	RCP1046
VR103	VR	RCP1044
VR151, 152	VR	RCP1046
	Other resistors	RD1/6PM□□□J
OTHERS		
CN1	CONNECTOR (6P)	KPE6
CN101	CONNECTOR	52045-1610
CN351	CONNECTOR	HLEM30S-1
CN381	CONNECTOR (7P)	KPE7
X351	CERAMIC RESONATOR	VSS1014
X401	XTAL RES (OSC)	PSS1006

⊙ SUB P.C.B ASSEMBLY (PWX1143)

SEMICONDUCTORS		
D701-704	DIODE	1SS254
D708	DIODE	1SS254
SWITCHES		
S701-716	SWITCH	PSG1006
OTHERS		
CN701	CONNECTOR	HLEM30R-1
V701	FL INDICATOR TUBE	PEL1050

MECHA P.C.B ASSEMBLY

SWITCHES		
S601-603	SWITCH	DSG1017

5. FOR HB TYPE

NOTES:
- *Parts without part number cannot be supplied.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

5.1 CONTRAST OF MISCELLANEOUS PARTS

The XD-Z54T/HB type is the same as the XD-Z54T/HE type with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE type	HB type	
⊙	SUB TRANS assembly	AWR1056	AWR1055	
⚠	FU101, FU151, FU152 (T1.6A/250V)	AEK-405	AEK-510	
⚠	FU102 (T1.25A/250V)	AEK-018	AEK-509	
⚠	AC Power cord	ADG1049	ADG1087	
	Operating instructions (Nederlands, Svenska, Español, Português	ARC1241	.....	
	Operating instructions (English, Deutsch, Français, Italiano)	ARE1171	.....	
	Operating instructions (English)	.....	ARB1282	

5.2 SUB TRANS assembly (AWR1055)

The difference in parts between the SUB TRANS assemblies of the HB type (AWR1055) and the HE type (AWR1056) is the jumper wire (220V and 240V).
For detailes, refer to LINE VOLTAGE SELECTION (See page 53).

6. SPECIFICATIONS

Twin CD cassette deck amplifier: XD-Z54T

Amplifier Section

DIN music power ··· 50 W + 50 W (1 kHz, T.H.D. 1 %, 8 ohms)
Continuous Power Output (DIN) ····· 33 W + 33 W
(1 kHz, T.H.D. 1 %, 8 ohms)
Graphic equalizer frequency band ····· 100 Hz, 330 Hz,
1 kHz, 3.3 kHz, 10 kHz, ±7 dB
S/N (DIN, continuous Power/50 mW)
PHONO ····· 68 dB/60 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 15 W, 8 ohms)** ··· No more than 0.2 %
Input sensitivity/impedance
PHONO (MM) ····· 2.5 mV/47 kΩ
VIDEO ····· 150 mV/22 kΩ

Tape Deck Section

Systems ····· 4 track, 2-channel stereo
Heads ····· Recording/playback head × 1
Playback head × 1
Erasing head × 1
Motor ····· DC servo 2 speed motor × 2
Wow and Flutter ····· No more than 0.09 % (WRMS)
Fast Winding Time ····· Approximately 95 seconds
(C-60 tape)
Frequency Response (−20 dB recording):
Normal tape ····· 35 Hz to 14,000 Hz ±6 dB (EIAJ)
CrO_2 tape ····· 35 Hz to 15,000 Hz ±6 dB (EIAJ)
Signal-to-Noise ratio
Dolby NR OFF ····· 56 dB (EIAJ)
Noise Reduction Effect
Dolby B type NR ON ····· More than 10 dB (at 5 kHz)

CD Section

Type ····· Compact disc digital audio system
Operating temperature ····· +5°C - +35°C
Frequency Response ····· 2 Hz - 20 kHz
S/N ····· 100 dB or more (EIAJ)
Wow and Flutter ····· Limit of measurement
(±0.001% W.PEAK) or less (EIAJ)
Number of channels ····· 2 channels (stereo)

Miscellaneous

Power requirements ····· a.c. 220 Volts ~, 50/60 Hz
Power Consumption ····· 240 W
Dimensions ····· 360 (W) × 375.5 (H) × 307 (D) mm
Weight (without package) ····· 9.5 kg

Furnished Parts

Operating Instructions ····· 1
Remote control unit ····· 1
Dry cell batteries ····· 2

- *Specifications and design subject to possible modification without notice due to improvement.*

** *Measured By Audio Spectrum Analyzer.*

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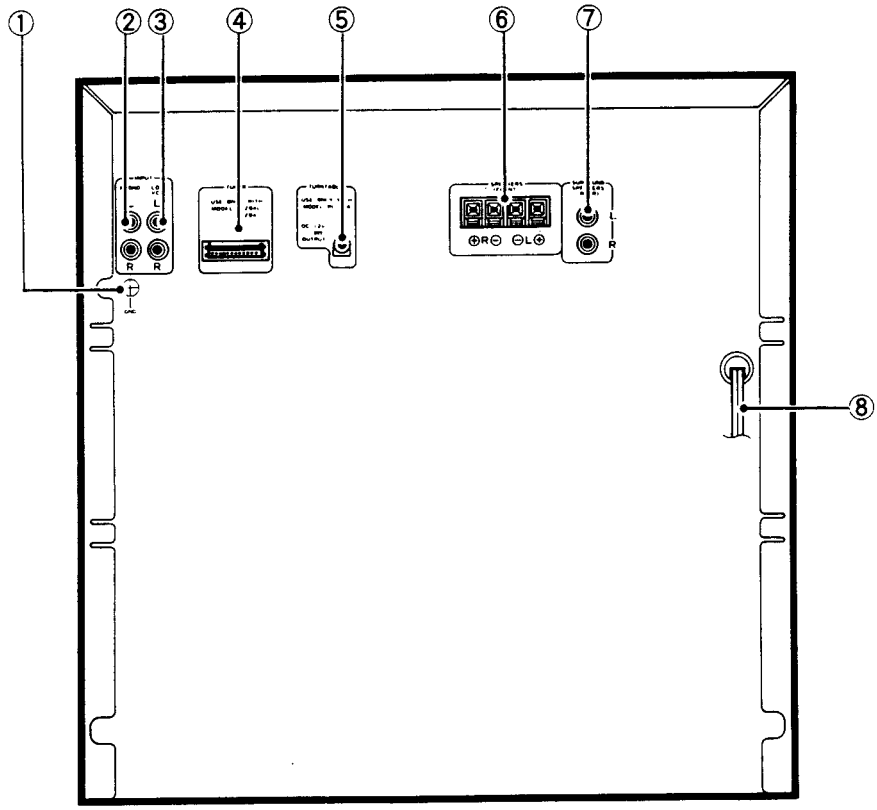
7. PANEL FACILITIES

REAR PANEL FACILITIES



① Ground terminal (GND)

Use a screwdriver to connect with the ground terminal (except for PL-Z94).

② PHONO input jacks

Connect the output cord of the turntable to these jacks.

③ LD/VCR input jacks

Connect to audio output jacks of LD player or VCR, etc.

④ TUNER jacks

Connect the tuner input/output cord here.

⑤ TURNTABLE (DC 12 V OUTPUT) jack

This jack supplies power to the turntable (PL-Z94).

⑥ SPEAKERS terminals

L: Connect the left speaker system as seen from the listening position.

R: Connect the right speaker system as seen from the listening position.

NOTE:
Connect a speaker system with a nominal impedance of between 6Ω to 16Ω

⑦ SURROUND (Rear) SPEAKER jack

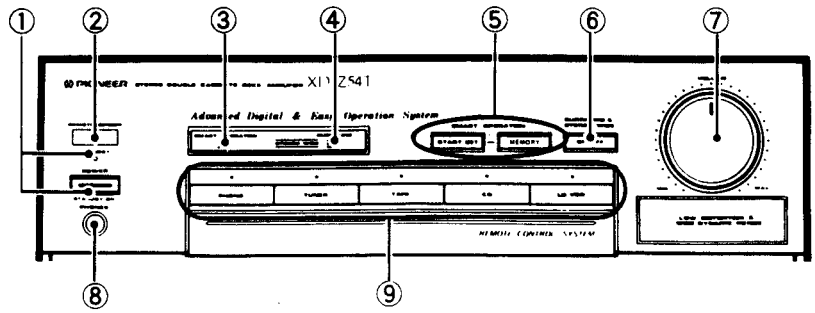
Connect the surround (rear) speaker systems.

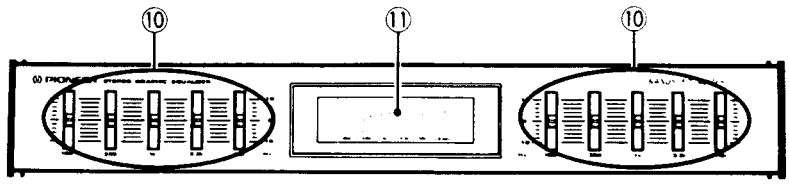
NOTE:
Connect a speaker system with a nominal impedance of 16 Ω or more.

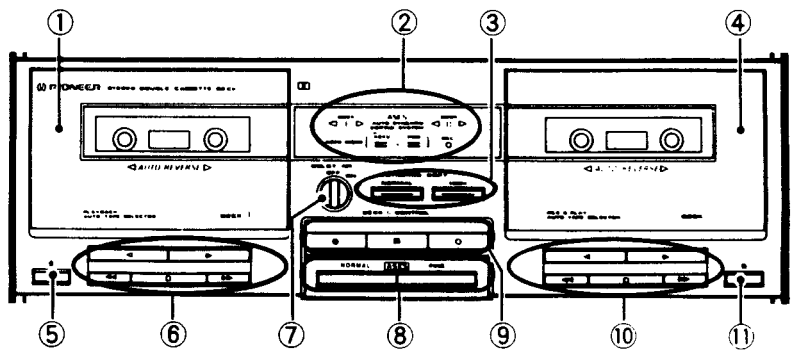
⑧ Power cord

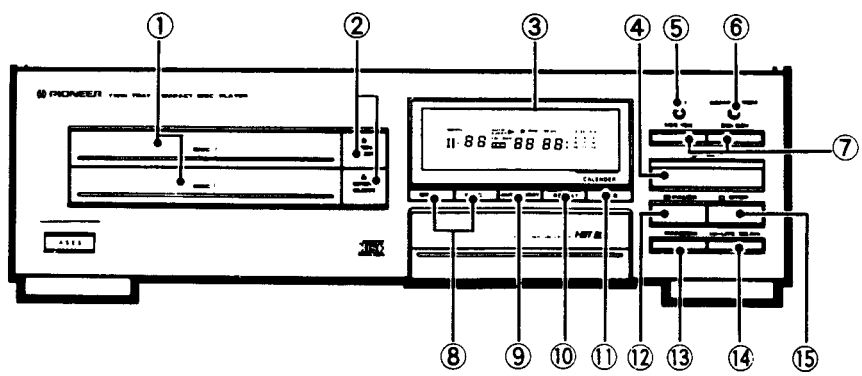
Connect this to the AC wall socket.

FRONT PANEL FACILITIES









- Tapes can be played back on Deck I; tapes can be played back and recorded on Deck II.
- Sound can be recorded as adjusted by the graphic equalizer (excluding synchro copy).

■ Amplifier section/Graphic equalizer section

① POWER STANDBY/ON button/indicator

This is the button for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.
The tuner section display indicates only the time.
The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

② REMOTE SENSOR window

③ SMART OPERATION indicator

Blinks when the SMART OPERATION mode is set to ON.

④ SURROUND indicator

Lights when the SURROUND & STEREO WIDE is set to ON.

⑤ SMART OPERATION buttons

[START/SET]
To operate the SMART OPERATION function and set the data.
[MEMORY]
To set the data for SMART OPERATION.

⑥ SURROUND & STEREO WIDE button

In ON position, you can enjoy SURROUND sound reproduction when the rear speakers are used.
In ON position, when the rear speakers are not used, you can enjoy STEREO WIDE sound reproduction with wider left-right spread.

NOTE:
SURROUND & STEREO WIDE effects cannot be obtained with a monaural signal source.

⑦ VOLUME control

⑧ PHONES (Headphone) jack

For stereo headphones.

NOTE:
There is no speaker output when headphones are plugged into the PHONES jack.

⑨ Input selector buttons/indicators

[PHONO] Press to play records on a turntable connected to the PHONO jacks.
[TUNER] Press to listen to radio broadcast.
[TAPE] Press to listen to cassette tape.
[CD] Press to listen to a compact disc.
[LD/VCR] Press to listen to stereo component connected to the LD/VCR jacks.

⑩ Graphic equalizer controls

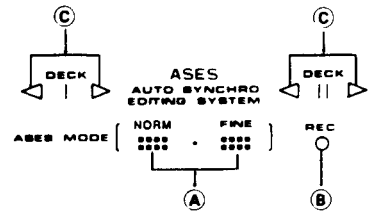
Fine adjustments in sound quality are possible using the 5 controls on the graphic equalizer.

⑪ DISPLAY section

■ Cassette Deck Section

① DECK I cassette door

② Operation indicators



ⒶASES (NORM, FINE): Lights when the A.S.E.S. (Auto Synchro Editing System) is operating.
ⒷREC: Lights when recording. Flashes when copying a tape.
Slow flashing = Normal copy
Rapid flashing = High speed copy
ⒸDirection (◁, ▷): Shows direction of tape travel.

③ SYNCHRO COPY buttons

Used for tape copying.

NORMAL: Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.

HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORMAL time.)

④ DECK II cassette door

⑤ Deck I eject button

⑥ Deck I Operation buttons

▷ **PLAY (FWD)** ····· For playing back a tape in the forward mode.
◁ **PLAY (REV)** ····· For playing back a tape in the reverse mode.
□ **STOP** ····· For stopping the tape.
►► **FAST** ····· Fast forward in forward mode, rewind in reverse mode.
◄◄ **FAST** ····· Rewind in forward mode, fast forward in reverse mode.

⑦ DOLBY* NR switch

Set this switch to the ON position to activate the DOLBY NR system.

- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded with Dolby B type NR be so marked on the label. This will help prevent incorrect setting of the noise reduction button during playback.

*

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⊡⊡ are trademarks of Dolby Laboratories Licensing Corporation.

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⑧ ASES (NORMAL, FINE) button

Used for automatically recording a CD on cassette tape.

⑨ DECK II CONTROL buttons

REC MUTE (●) Used for creating a blank space between songs. Pressing this button once creates an unrecorded 4-second space.
The unrecorded space is created for as long as this button is kept pressed during recording.

PAUSE (⊡⊡) Temporarily stops tape travel. Cancels pause mode when pressed again.

REC (●) To set to recording standby mode. Recording begins when you press the PLAY button (◁ or ▷).

⑩ Deck II Operation buttons:

Same as Deck I operation buttons ⑥.

⑪ Deck II eject button

■ CD player section

① DISC (I, II)

This is where the disc is set. When power is switched ON and the OPEN/CLOSE button is pressed, the tray is ejected forward.
To insert the tray, press the OPEN/CLOSE button, or lightly push the tray in with your finger. With the disc tray open, press the play button to close the disc tray and start playback.

② OPEN/CLOSE buttons (I, II)

Press when you wish to eject or load a disc. Each time the button is pressed, the tray is alternately pushed out or pulled in.

I: Opens and closes DISC I.
II: Opens and closes DISC II.

③ Indicators

COMPU PGM:	Display when COMPU PGM editing is set or used.
AUTO EJECT :	Lights during auto eject playback.
PGM :	Lights after programming (after program has been memorized).
RND :	Lights during random playback.
SCAN:	Lights during HI-LITE scan playback.
I, II :	Displays the disc number (I or II) of the disc to be played.
▷ :	Lights during playback.
⊡⊡ :	Lights during temporarily interrupted playback.
1 ► REP :	Lights during repeat playback of one track.
REP :	Lights during repeat play.
TRACK (figure):	Displays the current track number (during normal playback and programmed playback) or the track being programmed (during programming operation).
MINUTES (figure) :	Displays the minutes of the elapsed time, total playback time, and remaining time.
SECOND (figure) :	Displays the seconds of the elapsed time, total playback time, and remaining time.

Display change
Changes each time the TIME (CALENDER) button is pressed.

• TIME :	Displays the track number of the track being played (TRACK) and the elapsed time (minutes and seconds).
• REM :	Displays the remaining time on the track being played. When the TIME button is pressed again, the remaining time on the disc being played will be displayed.
• TOTAL :	Displays the total number of tracks on the disc (TRACK) and the overall playback time (minutes and seconds) of disc I. When the TIME button is pressed again, the total number of tracks on the disc (TRACK) and the overall playback time of disc II will be displayed. During playback, the display goes on for about 5 seconds before changing to the TIME display.

Music calender changes A to B (B to A) by holding down TIME (CALENDER) button.

• I/II: (music calender)	Only the numbers of the track recorded on DISC I (DISC II) will light. When inputing a program and when playing, only the programed track number will light. The track will go out one by one or the tracks are played.
• A/B (music calender)	TAPE SIDE A/TAPE SIDE B After editing, the track numbers that can be recorded on the A (B) side of the tape will light.
DISC I :	Displays DISC I.
DISC II :	Displays DISC II.

NOTE:
The music calendar displays only the track of a single disc. Switchover (Disc I, II) is executed manually; it cannot be done automatically.

④ PLAY button (▷)
Press to begin playback, and to cancel the pause mode.

⑤ PGM button (PROGRAM)
Use to program a sequence of tracks.
- Press this button after selecting a desired disc and track with DISC SELECT and track search buttons. Tunes will be added to the program in the order in which they are specified.

⑥ COMPU PGM button
By pressing this button and specifying the recording time of the tape (how many minutes), the CD player automatically selects the tracks according to their running time and programs them for optimum recording so that the blank portion of the end of the tape will be as short as possible.

⑦ Manual/Track search buttons (⊳⊲ ◁◁, ▷▷ ▷⊳)
To perform track search in normal playback, programmed playback or PAUSE mode.
You can advance to the next track or go back to the previous one by using the Manual/Track search buttons. The fast forward or fast reverse function will be activated by holding down these bottons.

⑧ DISC SELECT buttons
DISC I: Use to select DISC I for playback or programming.
DISC II: Use to select DISC II for playback or programming.
- During playback, when the disc select button for the disc not being played is pressed, the current playback will stop and playback of that disc will begin.

⑨ AUTO EJECT button
Press to perform auto eject playback.
When a disc is finished playing, the disc tray will automatically eject. The other disc tray will close and playback will start. By replacing discs, continuous playback can be maintained.

⑩ REPEAT button
Press this button for repeat playback. Pressing the button once, twice, or three times will change the repeat mode from single track repeat, all tracks repeat, and repeat playback cancellation.

⑪ TIME (CALENDER) button
This button selects the display mode. Each time the button is pressed, the indicator changes from TIME, REMAIN to TOTAL in that order. By keeping this button depressed, the calendar display can be switched over. (For details concerning the display contents, refer to the explanation about the indicators.)

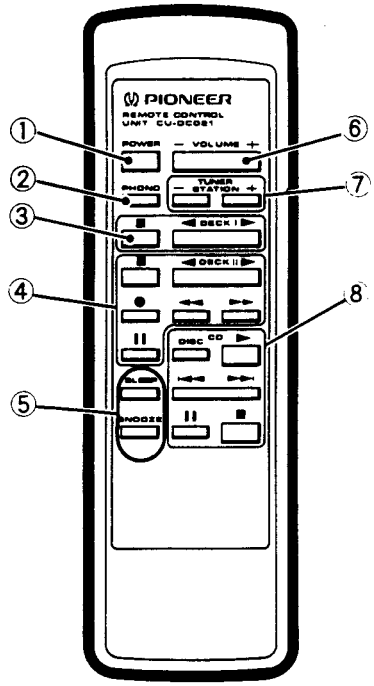
⑫ PAUSE button (▯▯)
Press to temporarily interrupt playback. When pressed again, the pause mode is cancelled and playback resumes.

⑬ RANDOM button
Press to begin random playback.

⑭ HI-LITE SCAN button
Every track of a CD is played back for 10 seconds, starting at a point one minute from the beginning of each song.
To set a new starting time for HI-LITE SCAN, press the HI-LITE SCAN button at any desired point during playback of a track. This point will be set as the new starting time. After that, each track is played back for 10 seconds beginning at the new starting time.

⑮ STOP button (□)
Press to stop playback. When pressed, the player goes into stop mode and all operations stop.
Press to clear a program. When pressed during stop mode, the program stored in memory is cleared.

Remote control unit



① POWER button

② PHONO button
Sets function to PHONO.

③ Deck I operation buttons
► ..... Forward play
◄ ..... Reverse play
■ ..... Stop

④ DECK II operation buttons
Same as Deck II operation buttons and DECK II CONTROL buttons on the CD cassette deck amplifier (Except for REC MUTE).

⑤ Timer operation buttons
SLEEP: Sets the sleep timer.
SNOOZE: Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.

⑥ VOLUME + (UP)/− (DOWN) buttons
When pressed, VOLUME on the amplifier is actually moved by a motor.

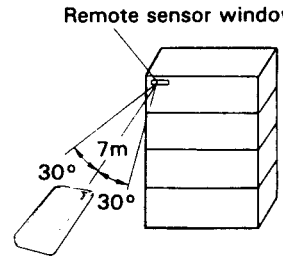
⑦ TUNER STATION buttons
- Before operation, memorize broadcast stations in the STATION CALL buttons.

\+ ..... Stations change in order in the upward direction.
− ..... Stations change in order in the downward direction.

⑧ CD operation buttons
► ..... Play
DISC ..... DISC selection
■ ..... Stop
▮▮ ..... Pause
|◄◄, ►►| ..... Track search

The amplifier input selector automatically switches to the music source being operated when you press the CD playback (►), cassette deck playback (◄, ►), or tuner station controls.

Range of remote control



When the remote control unit is pointed at the remote sensor window on the amplifier and any of its buttons is pressed, the tuner and other components can be operated by remote control.
Distance: Within a range of approx. 7 meters from the remote sensor window.
Angle: Within approx. 30 degrees from the center of the remote sensor window.
Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window.
Performance of the remote control unit is adversely affected by strong fluorescent light. Keep such lights away, especially from the sensor window.